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THE EFFECT OF A SUMMER TELEVISION READING PROGRAM ON THE
READING ACHIEVEMENT OF CHILDREN. FINAL REPORT.

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EVANSVILLE-VANDEBURGH SCHOOL CORP., IND.

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DESCRIPTORS- #READING RESEARCH, #GRADE 1, #READING
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THE FINAL REPORT OF A STUDY INVOLVING CHILDREN DURING THE SUMMER AFTER FIRST GRADE IS PRESENTED. THE STUDY WAS DESIGNED FOR THESE PURPOSES--(1) TO DETERMINE THE READING LOSS OR GAIN OF FIRST-GRADE CHILDREN DURING THE SUMMER OF 1965 AND 1966, (2) TO DEVELOP AND PRESENT A SUMMER READING PROGRAM BY TELEVISION, AND (3) TO TEST THE NULL HYPOTHESIS THAT THERE IS NO DIFFERENCE BETWEEN THE MEANS OF READING ACHIEVEMENT TESTS TAKEN BY CHILDREN WHO DID AND WHO DID NOT PARTICIPATE IN A SUMMER TELEVISED INSTRUCTION PROGRAM. A STEERING COMMITTEE WAS FORMED AT THE BEGINNING OF THE PROJECT TO APPROVE THE VARIOUS PHASES OF THE PROJECT AS WELL AS TO GIVE SUGGESTIONS AND COMMENTS CONCERNING PLANS FOR EACH PHASE. ACTIVITY BOOKLETS BASED ON CHILDREN'S INTERESTS WERE WRITTEN BY TEACHERS TO COMPLEMENT THE TELEVISION PROGRAM. FORTY HALF-HOUR LESSONS WERE PRESENTED ON TELEVISION. EXPERIMENTAL AND CONTROL GROUPS WERE TESTED IN MAY AND SEPTEMBER USING THE CALIFORNIA READING TEST AND THE CALIFORNIA TEST OF MENTAL MATURITY. THE DATA INDICATE THAT CHILDREN WHO WATCHED OVER ONE-HALF OF THE SUMMER TELEVISION PROGRAMS HAD HIGHER INTELLIGENCE SCORES, BETTER PRESUMMER AND POST SUMMER READING SCORES IN VOCABULARY, COMPREHENSION, AND TOTAL READING, AND MADE GAINS IN READING ABILITY IN ALL READING AREAS DURING THE SUMMER. THE AVERAGE IN READING SCORES FOR THE OTHER GROUPS DECLINED DURING THE SUMMER MONTHS. IMPLICATIONS AND RECOMMENDATIONS AS WELL AS FIGURES AND TABLES ARE PROVIDED. (BK)

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EA
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January 1967

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Jack W. Humphrey

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The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

RE 001 014

Evansville-Vanderburgh School Corporation

Evansville, Indiana

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Ray Billingsley, Accounting Supervisor
Robert S. Edelman, Director of Educational Television and Executive Producer of the Summer Program
Lowell Hopkins, Director of Elementary Education
Marie Strunk, Supervisor of Primary Education

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CHAPTER I

INTRODUCTION

First grade children are given special attention in reading programs throughout the United States. School superintendents realize the importance of the first grade teacher and are careful to appoint well qualified persons to teach beginning reading. The U.S. Office of Education has supported major projects to determine effective ways to help first grade children to learn to read. Most of the books provided for first grade children are either reading books or reading workbooks.

The first grade program of the Evansville-Vanderburgh School Corporation is typical of those in use throughout the United States. The Ginn Basic Readers are used in most of the classrooms; and the various supplementary materials including big books, phonograph records, sight cards, phonics charts, readiness books, and workbooks are available to all teachers. Each school has supplementary readers, and several hundred sets of co-basal readers can be obtained from a traveling library. All schools have central libraries, and other books can be obtained in large quantities from the public library.

Several teachers worked with other reading programs to furnish information for future book adoption committees. These series were: Houghton-Mifflin, i/t/a, Lippincott, Lyons and Carnahan, Macmillan, McGraw-Hill (programmed reading), Scott Foresman, and SRA.

Most of the children in the corporation attend half-day kindergarten programs where reading readiness is stressed in many activities including readiness charts, stories read by the teachers, and readiness books which accompany the Ginn program.

There are summer reading programs in Evansville for children from grades four through 12. Each of the public libraries has a summer reading club which is available to first grade children. Booklists for summer reading are sent home in final report card envelopes each year.

The Problem

At the end of the critical first grade program, children leave school for the long summer vacation where many of them do little reading. Six and seven year old children usually cannot go to libraries by themselves, and there are comparatively fewer books

in most homes for these children than for older pupils in upper grades. Most school systems do not operate summer reading classes for children leaving the first grade, so it would seem that reading skills might not increase over the summer and might even be lower when school would start in the fall.

It seems to be common knowledge among second grade teachers that children lose some of their reading skills during the summer vacation after the first grade. The purpose of this study is to determine the amount of loss that occurs during the summer and to see if a television reading program will prevent loss in reading.

Objectives

The objectives of this study involving children during the summer after the first grade are as follows:

1. To determine the reading loss or gain of first grade children during the summer of 1965 and 1966.
 - a. To find the loss or gain of boys and girls.
 - b. To find the loss or gain of the upper and lower intelligence quarters.
2. To develop and present a summer reading program by television.
3. To test the null hypothesis that there is no difference between the means of reading achievement tests taken by children who did and who did not participate in a summer television program.

Delimitations of the Study

The following delimitations were used during the study and should be considered when interpreting the results:

1. The control group was restricted to children in the Evansville-Vanderburgh School Corporation who were present for all tests in the spring and fall of 1965.
2. The experimental group was restricted to children in the Evansville-Vanderburgh School Corporation who were present for all tests in the spring and fall of 1966.
3. The findings were restricted to factors measured by the tests used.

Availability of Television Sets

A summer television program was possible in Evansville because the local educational television station had time available and because most of the children had television sets in their homes. In the spring of 1965, 97.5 per cent or 2395 first grade children out of 2455 had television sets in their homes. A higher figure was found in 1966 when 98.7 or 2300 out of 2330 children surveyed had television sets.

In 1965, 24 of the 60 children without television sets were able to view programs in the homes of neighbors or relatives. In 1966, 17 out of the 30 without television sets were able to view the program in other homes, so only 13 children out of 2330 or one-half of one per cent were without television sets.

Favorite Television Programs

A survey was made in May, 1966, to determine the favorite television programs of first grade children in the Evansville-Vanderburgh School Corporation so that television interests could be considered in the planning of the summer lessons. Table 1 shows the different programs selected by the 2214 children surveyed. The majority liked "adult" or family shows presented during prime television time rather than children's programs.

TABLE 1. FAVORITE TELEVISION PROGRAMS OF EVANSVILLE FIRST GRADERS
IN MAY, 1966

Number of Children	Favorite television program
758	Batman
165	Lost in Space
145	Superman
54	Bewitched
53	Daktari
52	Man From U.N.C.L.E.
48	Adams Family
41	Zorro
38	Flipper
34	Woody Woodpecker
30	Casper
30	Mighty Mouse
29	Red Skelton
29	Lassie
27	Yogi Bear
25	Jeannie
24	Honey West
22	F Troop
19	Cheyenne
18	Milton the Monster
18	Voyage to the Bottom of the Sea
17	Daniel Boone
17	Combat
16	Beatles
16	Flintstones
16	Porky Pig
16	Tom & Jerry
15	Atom Ant
14	Bonanza
14	Get Smart
13	Captain Kangaroo
13	Double Life of Henry Phyfe
12	Gidget
12	My Mother the Car
12	Munsters
12	Walt Disney
11	Gilligan's Island
10	Cartoons
10	Secret Agent
309	Other (95 programs)
TOTAL	2214

CHAPTER II

RELATED RESEARCH

Summer Reading Programs

A survey made by the National Education Association (32) during the summer of 1959 revealed that one-half of the urban school districts in the United States were conducting summer programs. At least two-thirds of the summer schools were in districts with a pupil population of 10,000 or more. The school systems surveyed indicated that there would be much expansion, and NDEA Title I funds have been used to initiate many new summer reading programs in all parts of the United States.

The NEA survey showed that the length of programs in elementary schools was from four to 10 weeks with a median of 6.6 weeks. Many of the summer schools provided for the traditional make-up and remedial courses needed by children, but over 80 per cent indicated that enrichment was the primary objective. It was concluded that the emphasis in summer school was changing from remedial work to a broader concept of working with all pupils.

Woods (38) questioned pupils on their likes and dislikes of summer school. The things they liked best included better and more interesting teaching methods, friendly and pleasant teachers, individualized instruction, ability to learn more in summer school, and new friends. They disliked having to get up early, long class periods, too much homework, interference with vacation, heat, and the fast pace of instruction.

In a study made by Fry (15) of 202 children who had attended two summer sessions and two regular sessions, children made a year's gain on standardized tests given at the beginning and end of the program. About 20 per cent of the pupils made negligible gains, but larger reading vocabularies and improved school success made the program worthwhile for all. A questionnaire to parents revealed that most of the children improved their attitudes toward reading.

Anderson and Benson (3) found that over 98 per cent of children who attended a summer reading program in Charlestown, West Virginia had improved their reading at the end of the program. The average improvement was 1.8 years after 90 hours of instruction.

A median gain of six months in a Florida summer reading program was reported by Hester (18). She felt that the results of

the program could not be measured adequately by a standardized reading test because changes in attitudes were not a part of the test.

The 1963 summer reading program in Evansville, Indiana (20) for 156 children in grades four to eight involved 40 one hour periods of instruction by teachers who had been given 20 hours of in-service training in reading. The average I.Q. for the group was 99.4. The average gain for the 110 boys was five months and was nine months for the 46 girls even though the average I.Q. for the girls was 97.4. Children with lower intelligence did as well as the other pupils.

A follow-up study of the pupils was done in the spring of 1964. A third form of the test used throughout the program was administered the last week of March to 132 pupils. As a group the children gained six months over the summer and five months from September to March for a total gain of 1.1 years. The past performances of the children had resulted in only .55 years in each school year, thus the children doubled their normal progress during the time of the test period.

Clark and Karp (8) did a follow-up study of children in New York City. A total of 104 children had gone through the five summer programs studied, and they made an average gain of eight months with only eight pupils making no gains. Tests given at different times from September to December after the program showed that the children maintained the gains made during the summer months.

Barbe (4) reported that a gain of six months as shown on a standardized reading test could be expected from the clinical program in Chattanooga. He felt that if children did nothing more than maintain their level of reading over the summer, they would be better off than most pupils who lose some of their reading skills during the summer.

Aasen (2) worked with three classrooms of fourth grade children, two in an experimental group and one in a control group. All of the children were tested in reading and intelligence before the summer vacation. The experimental group was given special instruction during the last few days before vacation on how to use summer time wisely by reading. Bibliographies were prepared for them, letters were sent to parents explaining how they could help, and children were introduced to the library. The control group was given no special help. At the end of the summer the experimental group increased its reading level an average of seven months while the control group stayed at the same level. A total of 68.8 per cent of the pupils in the experimental group improved in reading ability while only 37.5 per cent of the control group made gains over the summer.

Humphrey (21) reported that younger children do not do as well in summer programs as do older pupils. Fifty-six children attended the Indiana University Center for Child Study reading program during the summer of 1961. Standardized tests were given to the pupils at the beginning and end of the program and the following spring. The 17 pupils in the intermediate section showed a statistically significant gain during the summer program and on the follow-up test when expected gains based on intelligence and past achievement were compared with actual gains. However, the 16 younger children in the primary section did not achieve as well as expected during either time period.

Research concerning first grade summer reading programs seems to be limited. Aaron (1) described a major project by the state of Georgia to upgrade reading in the primary grades. Approximately 5700 children were taught for seven weeks throughout the state by more than 400 teachers. One-half of the children had just completed the first grade, and the rest were children who had just completed the second or third grade.

The purpose of the Georgia study was to prevent drop-outs later on by helping children with reading programs at an early age. The first graders in the study had to be at a primer level or lower, and individual attention was possible because the class size was restricted to no more than 15 pupils. The children had three hours of instruction each morning, and teachers used afternoons to help those with special problems as well as to plan lessons.

In-service training was given to all of the teachers. They used basal readers, experience stories, kits, and other supplementary materials to help the children improve their reading ability. Approximately a two month gain was reported for the first grade pupils on the Gates Primary Tests. Informal reading inventories indicated that children advanced an average of one-half grade level. The teachers were very favorable in their comments about the program, and especially liked the small group instruction and the uninterrupted time for teaching reading. Another result of the program was an intense statewide interest in reading.

Cutts and Moseley (9) stressed the results that can be made during the summer when a teacher inspires his pupils to read. Pupils not in regular summer school classes read more when a teacher works with them in the spring to organize a personal reading plan.

Harris (16) pointed out that summer is a time when much recreational reading should be done. He has found that reading

scores will remain about the same when no special effort is made to stimulate reading, but average gains of .7 years can be expected when summer reading is promoted. He suggested that this could be accomplished by spring visits to the library, by getting library cards for the children, by preparing recommended reading lists, and by having children record books read so that the list can be turned in at the beginning of school in the fall.

Educational Television

Approximately 11,000,000 American children were enrolled in educational television classrooms in 1963. Over 8,000,000 of the pupils were in kindergarten through grade eight classrooms. At that time over 30 countries were using television for educational purposes, and several of them had television courses in reading (27). Wittich (33) reported in 1965 that there were about 900 closed-circuit television systems with 7,000,000 pupils involved.

The first educational station began in May, 1953, in Houston, Texas. Today, there are over 100 educational television stations on the air, and by 1970 there should be 200 (17).

Television has become the greatest interest of children (27). Children up to the age of 12 spend as much time watching television as they do going to school (17). Witty (34) found that 96 per cent of approximately 2000 pupils had television sets, and 13 per cent had more than one set.

Witty's 1957 study showed that elementary pupils watched television an average of 26 hours per week, their parents averaged 22 hours, and their teachers nine hours. The amount of viewing television was not closely related to intelligence or scholarship except that excessive viewing seemed to go along with slightly lower academic achievement. He found that children's vocabularies were being enlarged by television, and that the strong interest of children in the medium could be used to provide motivation for learning.

In 1963 Witty (35) found that the average amount of television viewing by elementary pupils was 22 hours per week. Primary children were found to be viewing television less than older elementary school pupils. Second graders watched an average of 16 hours while fifth grade pupils averaged 25 hours. He also found that reading consumed about one-third as much time as television viewing. This amount is actually a small increase over the amount of time spent on reading prior to the advent of television (36).

Russell (28) felt that experimentation should be done to adapt television programs to some reading programs. Routley (27) believed that educators could not afford to overlook the use of educational television to teach reading because it is the greatest interest in a young child's life and will thus hold his interest better than any other medium will be able to do.

Other writers have been less enthusiastic about teaching reading on television. Durrell (12) wrote that television seems to be the least promising of techniques used with large groups because it does not allow variation in selection and classroom timing. Carner (7) cautions that children may view educational television programs passively as they might a program presented on commercial television. He recommended that activities be used which will actively involve the children in the learning situation.

Nason (25) stated that the objectives of educational television apply to reading instruction by television which can be successful if good planning is done and if the program of each classroom teacher is considered. The objectives are to provide information, start discussions, and influence interest, understanding, and attitudes of children. Some reading skills such as beginning reading instruction using i/t/a may not be successful on educational television because the process of beginning reading is too difficult and involves personal relations, skills, and attitudes beyond the scope of educational television.

There can be improved learning with educational television because outstanding teachers can be used, planning and preparation are better, visuals and mechanical aids can be better utilized, and student attention is high (14). Flierl (13) planned and produced educational television reading programs for intermediate grade pupils which were effective in increasing the reading abilities of children.

Sheldon (31) described a television program in reading for fourth and sixth grade central New York state pupils which was presented in 1958 and 1959. The children were given 70 minutes of reading instruction each week which was designed to teach word skills, comprehension, library skills, and recreational reading. Experimental and control groups were formed, and the experimental group using television reading instruction was found to be superior in vocabulary, comprehension, and total reading on a standardized test. The recommendations included one which suggested that a 30 minute period is adequate for teaching reading by television.

More television reading programs have been presented to adults than at any other age level (27). The Philadelphia Public Schools developed 100 half-hour programs to help the functional

illiterate to learn basic reading and writing skills. The program was shown each day for 20 weeks. The lessons from Monday through Thursday involved the introduction of words and script letters while Friday was used to review the skills taught during the week (22).

A different type of reading program for adults was developed in Denver. Parents of preschool children were shown 16 one-half hour programs which were designed to help them to prepare their children for beginning reading. After viewing the program, the parents used a manual and suggestions made during the program to work with their children.

Control and experimental groups were formed by McManus (24) to evaluate the effectiveness of the series. She found that the children whose parents had helped them by viewing the program made large gains in learning the names and sounds of letters, in simple alphabet and phonic ability, in sight-word recognition, and in the ability to identify words by using the beginning sound and context.

Some studies have been conducted to improve reading ability by watching commercial television. Mason (23) found that poor readers do not do as well as good readers in learning new words from television. Teachers in an experiment found out programs that their children watched and copied down words and phrases used. They then tested the pupils to see how well they could identify words used on the programs. First grade pupils were able to identify 10 per cent of the words shown them. It was recommended that teachers make up lessons to take advantage of the words that children know from watching television.

Another study involving first grade pupils was made by Schramm, Lyle, and Parker (29). They found that children starting in the first grade who had television sets had a significantly higher vocabulary than those with no television sets.

Several writers have suggested that commercial programs are helpful in producing better readers. Harris (16) advocated using television programs as motivation for related reading. Dechant (10) stated that television could help in broadening vocabulary, increasing interests, and motivating children to do further reading.

Zucker (39) promoted worthwhile viewing for her fourth grade pupils by suggesting programs to watch and by supplying background information for them. After the programs were presented, she led discussions to cover material shown. A display of books about each program was placed in the room at school. For example, space books were available when such shows were encouraged. The children also

looked for books that would make good television programs, and they wrote and performed them in the classroom.

Interests of First Grade Pupils

Summer reading programs with optional attendance must take into account the reading interests of pupils so that the programs will be appealing to each pupil and result in maximum participation.

Howes (19) found that boys and girls have about the same reading interests until they reach the age of eight or nine. The preferred activity by these younger children is watching television. They enjoyed stories based on familiar settings about such topics as pets, toys, and children. They also liked fairy tales, animal stories, and funny stories.

In a study of 300 pupils from the Chicago area in each of grades one and two, Witty (37) reported that the favorite game of boys was baseball and that girls preferred playing house. Boys liked books about animals, space, and pilots while girls preferred books about animals, children of other lands, and children at home.

Rogers and Robinson (26), in a study of 275 first graders, found that the favorite type of story for first graders is make-believe. The family activities as used in many basal readers did not rank high with the group. They liked fantasy, adventure, happiness, humor, and history better. The boys preferred stories with adventure or history while the girls ranked family stories higher than boys. The reading interest of good and poor readers was similar.

Byers (6) made tape recordings of 1860 first grade children during sharing periods in 34 communities around the United States to determine the interests of the pupils and how they related to the content of reading textbooks. The taping was done by the classroom teachers in their own rooms. They found that reading materials should contain more emphasis on science and should deal with real life drama. The content of present readers, in light of the interests as determined by the study, should be assessed for their appeal to boys.

The present interests of children are important in planning summer programs, but consideration should be made for developing permanent interests in children. Shankman (30) and Barbe (5) emphasized the need for having diverse interests rather than being interested only in a particular area. These interests developed by teachers can result in a permanent interest in reading by the pupils.

CHAPTER III

PROCEDURE

Steering Committee

A steering committee was formed at the beginning of the project. The committee was composed of the superintendent, assistant superintendent in charge of instruction, director of elementary education, director of educational television, accounting supervisor, primary supervisor, and the director of the project.

The purpose of the steering committee was to approve the various phases of the project as well as to give suggestions and comments concerning plans for each phase. As individual members were involved in various aspects of the research such as direction of the television program or writing the activity booklet, coordination was effected at committee meetings as well as at other times.

One of the major contributions of the steering committee was the selection of the television teacher. An announcement was placed in the school bulletin describing the position, tryout times, and where to get further details. A large number of teachers expressed interest in the job and were given instruction on how to prepare for a tryout on camera before the committee. Eight teachers presented programs, four on each of two successive days, and one was selected by the committee. The criteria for selection included appearance, voice, teaching ability, mannerisms, spontaneity, pacing, tact, personality, and language usage.* The television teacher was selected and appointed by the school board 15 months before the first program was shown so that she could be involved in all phases of the project.

Sequence of Events

After the formation of the steering committee in January, 1965, tests were selected and ordered for the entire project. The television teacher was appointed in March. In May, first and second grade teachers met together for a presentation on the entire research project including how to administer the reading and intelligence tests. First grade teachers then gave the tests to their pupils.

* See Appendix A

The activity book was written during the summer of 1965 by the primary supervisor and first and second grade teachers. The first grade tests were scored by secretaries during the summer.

In September all second graders were given an alternate form of the reading test which was scored by secretaries during the fall months. The art supervisor and printer began searching for the type requested by the authors of the activity book in the fall and did not find suitable type until December. The book was illustrated and printed during the winter and spring months. During this time a puppet, the television background set, and the uniform for the television teacher were designed and completed.

The television teacher was released from her normal responsibilities for one week in the spring of 1966 for training at the educational television station. All first grade children were tested in May, 1966, and the tests were scored during the summer.

An introductory program was presented in June, 1966, while children were still in school, and the activity books were distributed to children at that time. The latter half of the program was presented to the parents of the children. Forty one-half hour lessons were televised during the summer.

All second grade children were tested in reading in September, 1966, and the tests were scored by secretaries. The data was analyzed with the aid of computers in November, and the final report was completed in January, 1967.

Measuring Instruments

The tests used in the study were the California Reading Test, Lower Primary, Forms W and X, 1963 norms, and the California Short-Form Test of Mental Maturity, Primary, 1957 S-Form, 1958 norms.

The California Reading Test, Lower Primary, is divided into two parts, reading vocabulary and reading comprehension. The reading vocabulary section consists of four sections which are word form, word recognition, meaning of opposites, and picture association.

The word form section involves words of the same or different type face with the same or different meanings. The purpose of the section is to determine problems in identifying words such as lack of knowledge of the letters of the alphabet, visual discrimination, and reversals.

The word recognition test consists of 20 sets of three words each. The pupils underline one of the three words as pronounced by the teacher. The purpose of this test is to recognize differences in sound and word form as well as to see minor phonetic differences.

The items in the meaning of opposites section involve drawing a line from a key word to its opposite. The purpose of the test is to test reading vocabulary through knowledge of word opposites ranging from simple, concrete terms to words involving abstract concepts.

The picture association test involves matching words or phrases with a picture. The children must know the meaning of words in nine of the 15 items while three of four word interpretations are needed in six of the items.

The reading comprehension part of the California Reading Test involves following directions and choosing the best answer from stated facts and inferences.

The California Short-Form Test of Mental Maturity consists of seven tests that sample various kinds of mental processes to find the level and rate of mental development.

Spatial relationship is used in two tests. Sensing right and left involves the manipulation of visually presented objects and two and three dimensional perception. The manipulation of areas test requires the child to select one of three drawings which is a different view of another drawing shown.

Logical reasoning is tested in two sections. Each item from the test of similarities consists of five drawings with the first two alike in some way. The pupil finds one of the other three that is related to the first two. An inference test has from two to four pictures for each item. Children are given verbal situational tasks, and they must select the logical outcome or conclusion.

Numerical reasoning is measured by tests of number concepts and numerical concepts and shows the ability of children to recognize numerical concepts and relationships, to solve problems, and to use these principles in making correct inferences and conclusions.

The last test consists of 30 key words which are pronounced by the teacher and then identified by the children from among three pictures. This factor measures the child's comprehension of a list of words to determine his knowledge of verbal concepts.

Administration of Tests

The California reading and intelligence tests were purchased at the beginning of the study to insure that all forms would be available for the experimental and control groups. No standardized tests which yield grade level or intelligence scores are normally given to Evansville first grade children. The tests that accompany each Ginn reader are given to all children except those in classrooms where new reading materials are being used.

First and second grade teachers were given brief instructions on how to administer the tests at general meetings. The directions were very easy for the teachers to follow, and more questions were asked about the interpretation of the results rather than how to give the test. Special emphasis concerning the importance of the correct birthdate was given to first grade teachers to insure that intelligence quotients would be correct.

The tests were administered to the control and experimental groups during the same weeks in May and September of 1965 and 1966. The teachers had one week to give the tests and to return them to the reading center. Most of the tests were given on Tuesday or Wednesday. Written instructions were sent to teachers during the second year of the project as no general meeting seemed necessary. Since no scoring or reading of norms had to be done by teachers, the testing of pupils was a relatively easy task. All teachers received copies of the manual so that they could administer the test properly. The directions in the manuals were clear and easy to follow.

All tests were returned to the reading center where secretaries did all scoring. Each book had to be hand scored. A special template called a Hand-E-Score was used to grade the intelligence tests, and the California I.Q. Calculator was used to determine chronological ages as well as intelligence scores. Adding machines were used to total the reading subtest scores.

Activity Book*

A book was needed by each child to get him actively involved in the program, to help him become enthusiastic about the program through ownership of a special summer book, and to provide skill lessons to be completed as introduced by the television teacher.

* See Appendix C.

Eight first and second grade teachers including the television teacher plus the primary supervisor wrote the lessons in the activity book during the summer of 1965 following a rough outline developed prior to the workshop. These teachers were of different ages and had taught and had been taught with a variety of methods, so they were able to present many different methods and ideas for consideration by the group.

The content of the book was based on the judgment of the workshop participants who knew the problems of first and second grade children and who were aware of the summer loss and resulting fall reading deficiencies. They were concerned about the attitudes of children and suggested fun pages. They knew that many children forget the names and sounds of letters over the summer and that there is confusion about letters such as "b" and "d." Possessives, blends, recreational reading, and other reading skills were included in the final draft.

The title of the activity book, Ride the Reading Rocket, was selected because of the high interest in space activities by both boys and girls. A special feature was a space creature who was named Rocko by the children at the beginning of the program. He appears throughout the book and was a part of the television program.

The alphabet was placed on the inside of the front cover as a reference for making correct letters in the book. In the back of the book were pages to record attendance and books read. Addressed postcards were placed in the book for children and parents to mail to the television teacher. They were used to send in a name for the puppet, the name of the book liked best, comments by parents, and other information.

Other pages featured puzzles, coloring, and writing letters and words. Blanks for 40 words of the day were spaced throughout the book. Numerals were spelled and written at the bottom of each page. A note to parents was placed in the front of the book to give them directions on how to help their child during the summer.

The lessons in the activity book were designed so that children could not do most of them without directions from the teacher so that lessons would be done correctly at the right time. The use of each page is described later in the chapter.

The vocabulary used in the activity book was generally restricted to words normally introduced in the first grade with other words used as necessary to develop lessons about special topics. The skills involved in the lessons were those normally used in the first grade by the regular classroom teachers. They were planned

to motivate the listener, to give practice in word-study and comprehension skills, to provide a review of the first grade vocabulary, to introduce additional sight words, to develop the ability to follow directions, to furnish opportunities for self-direction, and to stimulate creative expression. A summary of the skills in the activity book is listed below.

Word Study Skills

Word Recognition. The vocabulary commonly developed during the first year of reading instruction is thoroughly reviewed. The "Word of the Day" device allows for the presentation of unfamiliar words and sight words such as "which."

Word Analysis.

Capital and smaller letter forms: 5, 25, 35, 44, 47.

Initial consonants: 15, 18, 19, 26, 41, 44, 46, 47, 49,
53, 66, 68.

Initial consonant blends: 9, 24, 53, 66, 67, 68, 76.

Final consonants: 18, 46, 47, 49, 71, 89.

Digraphs: 9, 64, 68.

Vowels: 44, 82, 83, 84.

Rhyming elements: 19, 22, 23, 40, 43, 53, 66, 68, 77.

Plurals and possessives: 20.

Verb forms: 16, 36.

Compound words: 74, 78.

Spelling: 63, 66, 92.

Kinesthetic Discrimination.

Word of the day: 2, 4, 6, 8, 11, 15, 16, 18, 20, 22, 25,
26, 31, 34, 36, 38, 41, 43, 46, 49, 51, 54, 55, 59, 60, 62, 64,
67, 68, 71, 72, 74, 77, 79, 81, 82, 86, 90, 92, 94.

Follow-the-dot: 5, 51, 35, 47, 57, 67.

Maze: 7, 10, 59, 97.

Cutting and posting: 27, 57.

Coloring by code: 7, 13, 73, 77.

Comprehension Skills

Interpretation.

Of pictures: 9, 10, 12, 13, 18, 19, 24, 30, 32, 33, 34, 40, 43, 44, 45, 46, 49, 50, 52, 53, 59, 62, 63, 64, 68, 69, 76, 80, 81, 82, 86, 89, 90, 97.

Of words: 7, 12, 13, 17, 36, 37, 38, 39, 60, 70, 73, 74, 84, 87, 95.

Of phrases: 2, 51, 58.

Of sentences: 2, 4, 8, 10, 14, 16, 19, 20, 22, 29, 31, 34, 36, 38, 43, 45, 56, 60, 62, 65, 68, 71, 77, 78, 79, 81, 82, 83, 84, 86, 89, 90.

Of paragraphs: 15, 42, 47, 48, 50, 69, 72, 80.

Of stories: 4, 8, 11, 28, 32, 33, 54, 61, 79, 94.

Of rhymes: 6, 55, 59, 96.

Of directions: 6, 7, 13, 15, 19, 34, 38, 60, 90.

Of sequence: 1, 5, 7, 14, 21, 25, 40, 47, 50, 55, 56, 57, 60, 61, 63, 67, 73, 80, 85, 90, 92.

Of ideas: 3, 11, 15, 17, 30, 42, 54, 75, 87, 88, 91, 98, 99.

Concept Building.

Relationships: 38, 39, 51, 65, 95.

Opposites: 12, 69, 70, 81.

Word meanings: 12, 14, 17, 30, 34, 37, 38, 51, 58, 60, 61, 68, 69, 70, 78, 81, 86, 87, 90, 95.

The authors of the activity book decided to use manuscript letters so that the writing of letters would be emphasized in the program. After a search for several months by the illustrator and printer, the body type selected was 24 point Spartan book and the heading type was 24 point Spartan black.

The time needed to illustrate the 106 pages plus the cover was under-estimated by the steering committee as well as the illustrator who spent all spare time for six months preparing the book. Each page was approved by the project director, supervisor of primary instruction, and television teacher before being sent to the printer.

Preparation for Televising the Program

Frequent meetings were held by the executive producer and television teacher beginning in May, 1965, to discuss various aspects of the program including what could and could not effectively be done with television. The teacher learned the proper way to mount pictures, and furnished the station with lists of words to be mounted on slides. They worked out the opening and closing visuals and the recording of a theme song written by a member of the summer workshop and recorded by a first grade teacher. Over 2000 pictures were mounted during the year prior to the start of the program, and an average of 35 per day or approximately 1600 were used during the summer.

A puppet was designed by the illustrator to be used daily in the program. The purpose of the puppet was to capitalize on the inherent interest children have in puppets as well as to have someone to assist with the pacing of the program. Pictures of the puppet were also used throughout the activity book.

The television set was designed as the inside of a space ship and included control knobs, chalkboard, flannel board, and space for mounting materials. The costume of the teacher was a spacesuit which was designed to show up on black and white television similar to space suits in the U.S. space program. The spacesuit was designed and made by the television teacher.

The teacher was given a week's leave of absence to work at

the educational television station. She was given a complete orientation by the executive producer of the summer program, worked in the control room, and observed teachers preparing and presenting programs. The television teacher presented an in-service television program to area teachers on her last day at the station. She described the program to teachers, emphasized the importance of the project, and reviewed their role in gathering data and preparing children for the summer reading class.

Presentation of the Program

Some children knew of the summer reading program prior to the spring of 1966 through newspaper and television publicity, but a massive campaign was needed to get the support of children and parents. Signs were printed and sent to all first grade teachers for display on bulletin boards. Many of the teachers made special bulletin board displays featuring the program as well as the need for summer reading.

Several newspaper stories and television programs were presented to the public just before the beginning of the telecast. Visits were made to a large number of classrooms by the television teacher to build enthusiasm for the program.

On Thursday of the last week of school, a 15 minute television program was presented to all first graders. The children met the teacher, Miss Sandy, and learned about the exciting activities of the summer television program. The children met the puppet and were invited to help select a name for him by sending in their suggestions on the postcard in the activity book. Activity books were distributed to children, and their use with the program was described so pupils would not work ahead prior to directions being given with each lesson. The beginning date, time, and channel were emphasized at the end of the presentation.

The next 15 minutes of television time involved only parents who had been notified earlier in the week to observe the entire 30 minutes. Parents were given information concerning the need for the program as well as how they could help by getting children up on time, by seeing that children had crayons and pencils to work with, and by helping them understand directions when necessary. The importance of recreational reading was emphasized, and parents were encouraged to take children to the library. Parents were asked to be interested in the activity book which was to be brought home by the child that evening, and they were reminded of the starting date and time.

The theme of the summer television program was a space trip

to Jupiter with Miss Sandy as the pilot and a puppet who was named Rocko by the children and who was trying to learn to read. All scenes took place on the rocket ship except that guests from earth could be zeroed in through special machines and presented to the children.

Each day the children from one of the schools were taken on an imaginary rocket ride. The school was mentioned by name and all of the pupils were invited to climb aboard.

A word of the day was written each day on the chalkboard by the teacher and in the activity book by the children. The word selected related to the lesson presented that day.

The attendance page was illustrated by the children rather than filled with X's or colored in. A simple picture relating to the day's lesson was drawn by the teacher, and the children made similar pictures for their books. For example, they drew a lamb the day one was shown on the program.

Most of the pages in the activity book were designed so that children could not work them without directions from the teacher. Each day's lesson was planned so that there would be entertainment for the children as well as skill lessons. Each of the 40 lessons is described to give a comprehensive picture of the entire program. Daily activities such as the word of the day and the marking of the attendance page are not included.

Lesson 1. During the first 10 minutes, the teacher described the reading rocket and told the children how they could help teach the puppet from Jupiter. She used the flashback technique to show how the puppet selected the name Rocko from all the postcards sent in.

Page one was done with the children and was concerned with a review of number names. The teacher showed the children how to fill in the blanks on page two and how to select the activity they liked best at the bottom of the page. The children taught the puppet new words by initial consonant substitution, and then the children were instructed to draw a picture of what they liked to do best on page three.

Lesson 2. The children and the puppet learned a new word, rocket, and super slides were used to show them how to figure out other words that rhymed with rocket. A poem was then read to the children about 10 little rockets. Each time something happened one rocket took off, and it would disappear on the pull visual.

The teacher read a story about an astronaut which was followed by an activity book lesson on page four which was about space

and was a comprehension and vocabulary review. The puppet answered the questions after the children at home had a chance to circle the correct answers.

Page five was a fun page which emphasized the capital letters of the alphabet. After explaining page five, the children read a typed riddle* from the screen that told them how to color the puppet.

Lesson 3. The teacher and children read a typed riddle about a surprise for the puppet which was in a box. The puppet guessed correctly and won a toy mouse. The teacher read a story about a mouse which also included color words. The teacher and children then read page six together which was a poem that reviewed color words.

The teacher explained page seven and showed the children how to color the circles. Two other activities were suggested for page seven. The children could pretend that the nine circles were planets and could see if they could start at one and visit each planet in order and end at nine. They were also motivated to look up the names of the planets in a reference book and to print them under the circles.

Objects were placed in sets on the flannel board, and the children told the puppet the objects that rhymed in each set. The children also listened to the teacher pronounce four words, and they had to pick the one word that did not start with the same blend.

Lesson 4. The puppet found a book in the library corner about space and had printed the names of all the planets in his activity book which was shown to the children. The teacher and children then read page eight together which was designed as a comprehension and vocabulary review. The puppet answered the four questions at the bottom of the page after the children had time to select an answer.

To review the "br," "ch," and "sh" sounds, the children read three separate riddles and guessed an object that the teacher had which began with that sound. Words were then matched with pictures on the flannel board that started with these sounds.

Page nine was then introduced and gave children an opportunity

*Typed exercises were done with a primary typewriter and blown up on the screen so that they could be read by children.

to use and write the "br," "ch," and "sh" sounds. Page 10 directions were given by the teacher. It was a fun page in which the children had to draw a line through a maze to see if the question at the bottom of the page was yes or no.

Lesson 5. The puppet was told that he could open a present if he could read a typed riddle about the package. The children helped him, and he got a toy duck that walked. The teacher read a story about a duck who liked the water. A guest sang a song about ducks, and the children were encouraged to act it out with the teacher.

The teacher and children read the story on page 11 to the puppet which involved comprehension, vocabulary review, and creative thinking. The teacher directed the children to end the story themselves by writing and drawing in what they thought frightened the frog away. On page 12 the children were instructed to write hot or cold under each picture. The children were then shown how to follow the code for coloring in page 13. A rocket ship was visible after the coloring was finished.

Lesson 6. The program was begun with the puppet saying a space poem and the children saying the rhyming words which the teacher held up. The teacher used super slides to review the words that rhymed with rocket. Then the puppet showed and read three silly rhymes he wrote over the weekend. The teacher encouraged each child to write a rhyme on their blank postcards and to mail them in.

The teacher explained page 14 which was a comprehension puzzle page. Two of the six examples were worked by the teacher who gave children time to say the answer.* Page 15 involved initial consonant sound riddles which were presented by the teacher who also gave the answers. The children filled in the blanks and drew the illustrations in the books.

The children read a riddle about what they were going to make that day on their attendance chart. Then they read sentences that told them how many times to clap their hands as they reviewed number names.

Lesson 7. The teacher read some of the rhymes sent in by children and then read a story which involved a mathematical mystery. The children and teacher helped the puppet to understand the mystery by putting objects in sets.

*There was usually some work to be done in the activity book each day after the program.

Next, the children read sentences that were related to the story, and they had to choose the word with the correct ending to go in the blank. For example, five ducks were _____. (quacks, quacked, quacking)

Then the teacher explained how to work page 16 which reviewed the "ed" ending. The teacher worked two of the questions by printing a word from the bottom of the page in the correct blank. Number names were reviewed on page 17 by having the children draw the number of objects needed for each set.

Lesson 8. The puppet read more rhymes sent in by children and then explained that he needed help with page 17.* The teacher and children helped him to correct the page. Next the teacher used a picture with several objects on it and asked the children what sound each object began and ended with. Then the teacher and children worked page 18 together which called for them to draw a line to the sound with which the picture began or ended.

On page 19 the children worked with beginning sounds and picture completion. Then the children had a surprise for the puppet which was in a box. The children helped the puppet to read the riddle, and the puppet got a toy turtle from the box. At the close of the program, the teacher said a poem about a turtle and the children acted it out.

Lesson 9. The puppet brought in his first library book which he could read. The title of the book was written in the back of the activity book on page 100, and children were encouraged to get books from the library and to enter the title as Rocko had done. The book was about turtles, and the teacher demonstrated how to make a paper turtle.

The police sergeant in charge of school safety was the first guest on the program. He explained the safety rules that the puppet should follow when he visits earth.

Before giving directions from page 20, the children saw pictures and then sentences about each picture which showed the proper way to use the possessive case and plural form. Then the children wrote the correct word on page 20 that matched the sentence and picture below.

Page 21 involved following dots counting by twos to form a picture.

*Several parents and children were used to feed back problems to the teacher. The children had difficulty with page 17.

Lesson 10. The puppet found a safety rhyme which he read and then asked the children to read with him. The teacher read a story about children playing in a park in which each child told where his father worked while pictures of the father at work were shown on the screen.

The teacher read a poem, and the puppet and children had to supply the rhyming words which were superimposed on the screen. The teacher explained page 22 which called for children to circle the correct rhyming word that made sense in the sentence. On page 23 the children made pictures of other words that rhyme with the word and picture in each box. Slides were superimposed to show other words that rhymed, and children were encouraged to write words as well as to draw pictures of rhyming words.

Lesson 11. The first lesson during the third week was telecast on the fourth of July, and the teacher explained why the day was a holiday. She read a story about firecrackers and used super slides to have children read certain words in the story.

The children were shown a picture and then told the teacher which blend on the flannel board started like the picture. Then page 24 was explained, and the children matched blends from the top of the page with pictures and endings of words. Page 25 was a review of capital letters where small letters were presented and the children made capital letters using the chart in the front of the book when necessary.

The puppet then gave the teacher an American flag, and the children and puppet read a poem on a typed card about the flag. The show closed with the teacher marching to music and encouraging the children to march with her.

Lesson 12. The children were shown five pictures, and they hunted for objects in each picture that started with the "b" sound. Then page 26 was presented which involved the correct way of making the letter "b."

Pages 27, 28, and 29 were all about birthdays. The candles were cut out on page 29 and pasted on the cake on page 27. The story on page 28 was read, and the questions were presented about the story on page 29.

The teacher read a birthday story and flashed super slides of all the words that began with the letter "b."

Lesson 13. The puppet found a book about birthdays and he read one page to the children. The teacher showed him where to write the titles of the books read on page 100 in the activity book.

A story was read to the children about a monkey. Then the teacher had a surprise for the puppet in a box which he got to see after reading a riddle. He found a pair of roller skates, and the teacher asked the children to help the puppet find other pairs on the flannel board.

The children were given directions to circle the things that came in pairs on page 30. Next they circled the correct answer to the questions on page 31. The answers were words that are easily confused. Then the children read sentences on the screen and spelled the missing word for each blank. For example, the words "pair" and "pear" were left out of three sentences.

Lesson 14. The puppet made a difficult puzzle, similar to the one on page 35, for the teacher to work. Then an employee from the zoo was a guest. He brought a hedgehog and told about other animals at the zoo.

The teacher and children read part of the rebus on pages 32 and 33 which reviewed vocabulary. On page 34 the children located zoo animals hidden in the picture and read clues at the bottom of the page to help them. Page 35 involved following the dots with numerals and letters, and then making a sentence by writing the letter by the numerals indicated at the bottom of the page.

The program closed with the children reading three typed riddles about zoo animals. A picture of the zoo animal which was the correct answer was then shown on the screen.

Lesson 15. The puppet and children read a story and then discovered that they had a guest who lived on a farm and who had brought a lamb with him. He told about raising lambs and showed snapshots of farm scenes.

The children were shown a picture and a super slide of the name of the object so that they could circle the correct noise the object made on page 36. After completing questions one through seven, the teacher checked the puppet's book and showed it to the children. At the bottom of the page, the children circled the correct word with the ending "ing" that belonged in the blank. Then the children finished the farm scene on page 37 by drawing animals by their names.

Three typed riddles were read about farm animals, and pictures of the correct answer were shown. The teacher encouraged children to make paper zoo and farm animals over the weekend.

Lesson 16. The puppet showed the animals he made over the

weekend. The teacher and puppet put the zoo animals in one set and the farm animals in another set.

The teacher read a story about ducks, and the children spelled the various ducks' names which rhymed by initial consonant substitution. On page 38 the children put a "z" by the zoo animals and an "f" by the farm animals. Page 39 provided practice in classifying the animals. For enrichment, the children were encouraged to look up other names of animals to fill all the blanks.

The children heard a record and saw a pull visual about animals that make noises. The teacher and children sang the noises with the record. The teacher put the beginning and ending sounds of four zoo and two farm animals on the flannel board. She gave the children clues and they guessed the names. A picture of the correct answer was flashed on the screen.

Lesson 17. The puppet read a poem about rag dolls. The teacher held up Raggedy Ann and Raggedy Andy dolls and moved them according to the lines in the poem. Then she read a story about Raggedy Ann and super slides of all the words in the story that began with the letter "d" were flashed on the screen. A record about being a rag doll was played, and the teacher motivated the children to be rag dolls and to follow the music with her.

On page 40 the children found words at the bottom of the page that rhymed with the picture in the puzzle, and then wrote the correct answers in the blanks. Page 41 emphasized the correct form of the letter "d". The teacher and children traced the letter, and the children wrote the letter to complete words which were illustrated in the book. On page 42 the children drew pictures to answer the riddles.

The teacher made new words that started with the letter "d" on the flannel board by changing the initial consonant to the letter "d".

Lesson 18. A library book was brought in by the puppet. He forgot the word "could" while reading a page to the children. The children and the teacher taught the puppet "could," "would," and "should" by the use of super slides. Then the children read and answered three questions with these new words in them.

The teacher explained page 43 where the children marked the correct answer to the question. The purpose of page 44 was to review the lower case letters of the alphabet, and the teacher read an alphabet story when introducing the page to the children. On page 45 the children matched the sentences with the correct pictures.

The children read a three line typed card about the funniest thing they ever saw. They chose the thing they thought would look the funniest.

Lesson 19. The teacher asked the parents watching the show to send in their comments on the postcard found in the back of the activity book. The puppet showed how many library books he had read and recorded them on page 100 in his book.

The children saw a picture of penguins, and the teacher read to them about penguins from a science book. The puppet read a poem about penguins, and the number names mentioned in the poem were flashed on the screen. Then the teacher read a story to the children about penguins.

The children read two words that started with the letters "b" and "d." They had to spell the correct word that fit in the missing blanks. Pairs such as "big" and "dig" were used. A number of animals whose names began with a "b" or "d" were shown to the puppet, and he said the letter they started with.

On page 46 the children filled in the "b" or "d" needed. The teacher did the first row with them on this lesson which emphasized the initial and final position of "b" and "d". The lower case letters were followed in sequence on page 47 to make the rest of the penguin. The story at the bottom of the page was read, and the blank completed.

Lesson 20. A guest explained how to observe insects at home, on a camping trip, or in the woods. He told about the characteristics of insects in general and explained life in an ant colony by reading a science story about ants.

The teacher explained page 48 which was a comprehension and vocabulary review. On page 49 beginning and ending consonant sounds were written with the aid of pictures in the book. Several examples were worked by the teacher.

A camping story was read to the children and super slides were used to flash words in the story for the children to read. A picture of a family camping was shown, and the children were asked which sounds they heard at the beginning and ending of various objects in the visual.

Lesson 21. The children and the puppet read a poem on a typed card about a picnic which was followed by a story about a picnic read by the teacher.

Four pictures were placed on the flannel board showing

different things that happen at a picnic. Then the children read a sequence story about the events that took place at the picnic.

Directions were given for pages 50, 51, and 52, and a few examples were done on each page. Page 50 required the matching of pictures with the story to give practice with sequence. Page 51 involved circling correct answers about things to eat or do at a picnic. Page 52 was a fun page where pictures were completed.

A picture of a picnic was shown the children, and they told the beginning and ending sounds of several objects in the picture.

Lesson 22. A typed paragraph was shown so the puppet and children could find out the kind of animal the teacher was going to read about in a story. The teacher then read a story about a horse. The children read four sentences about the story and found their correct order and sequence according to the story. New words were formed on the flannel board by substituting initial consonants and blends.

On page 53 the children substituted blends for consonants to make words that rhymed with the picture by the word. The blends to be used were listed at the bottom of the page. The teacher showed the children how to work the exercise and how to cross out the blends used on the bottom of the page. Page 54 was a comprehension and vocabulary review lesson. The children read the sentences and drew pictures on the right side of the page.

The children read riddles on the screen and tried to guess the correct objects that started with various blends.

Lesson 23. The puppet read headlines in the newspaper about the launching of Gemini 10. The teacher read a riddle, and then the children matched poems with pictures on page 55.

A poem was read by the puppet about firemen, and the children and teacher said the response line. Two guests, a fire inspector and fire fighter, were then introduced. The firemen told about and showed pictures of the equipment they used, and they stressed fire safety rules.

On page 56 the children worked a puzzle page about firemen which involved sentence completion and vocabulary review. On page 57 they cut and pasted pieces to finish the fireman puzzle. Next the teacher read a story about firemen.

Lesson 24. The puppet brought a parent comment postcard and said it could talk. The card then told the story of what happened to him when he was placed in a mail box. Pictures were shown while

another teacher told the postcard's story.

The postman who delivered the mail to the television station was interviewed, and he showed pictures of the various steps a letter must follow before being delivered.

On page 58 the children completed sentences on the left with answers at the right of the page. On page 59 they followed directions to aid the postman in finding their houses.

The children looked at the word mailman and saw that it was a compound word. They made other words that rhymed with mail and then with men.

Lesson 25. Recreational reading was encouraged by the puppet showing page 100 in his book so the children could see how many books he had read.

The puppet had a riddle for the children to read, then the teacher read a story that developed the ordinal number concept. The puppet read a poem using the ordinal number concept, and pull visuals and super slides of ordinal words were shown.

The children colored the boys on page 60 according to the directions in the story. On page 61 they had to read the story to match the names of boys with the position they finished in the race. The children were encouraged to cut out five objects over the weekend and to put an ordinal number word on each one.

Lesson 26. The teacher and puppet talked about what happened over the weekend including the reading of library books. A guest, one of the school corporation's science teachers, discussed his pet squirrel. This part of the program was followed by putting "who," "what," "when," and "where" on the flannel board and asking questions about the program presented by the guest. Then the children read two questions about the puppet that started with the word "what" and chose the correct answer.

On page 62 the children circled the correct answers to the questions. On page 63 the children looked at the pictures and scrambled words and spelled them correctly.

Lesson 27. At the beginning of the program the teacher and puppet showed three pictures of the puppet's planet, Jupiter. The teacher read a story that stressed the "ch" sound, and the children figured out the sequence of the events in the story.

A visual was shown that had many objects that started with "ch," and the children found as many as they could. The same.

technique was then used with "sh". On page 65 they matched rockets that were alike and wrote their answer at the bottom of the page.

The children turned to the song Astronauts on page 102 in their books. The teacher read the words with them in preparation for learning the song the next day.

Lesson 28. The puppet carried in a library book in his mouth about astronauts that he had read. The teacher and puppet counted the titles on page 100 of the books that he had read.

The teacher pronounced words that rhymed with car for the children to spell on page 66. They added initial consonants or blends as needed on the left of the page and then wrote endings on the right side. On page 67 they followed the numerals to make a star.

The author of Astronauts taught the children how to sing the song and then sang the theme with the children which she had also written.

Lesson 29. The puppet asked the teacher to read a story, and she read one which told why some brothers were sad. They talked about the story, and seven words from the story that rhymed with sad were superimposed on the screen for the puppet to attack phonetically.

On page 68 the children circled the correct rhyming word that went with the picture. On page 69 the teacher showed the children that they had to read the whole story to make the correct faces on the pictures.

The lesson was concluded by the teacher showing a set of many objects to the puppet who matched those that rhymed.

Lesson 30. The teacher had a treasure box but none of her keys would fit. The puppet wanted to hear a pirate story, but the teacher had none in the library corner. A librarian on Earth was called in, and she read a pirate story. Then the librarian, teacher, and puppet talked about getting books from the library. The librarian checked the puppet's book to see how many books he had read, and it was announced that pictures of Miss Sandy would be available at all libraries in the county along with sight word lists.

Pictures of opposites were shown, and the teacher showed the children how to work page 70 which reviewed opposites. The children drew lines from each word to the correct picture. On

page 71 the children found the correct word on each key that completed the sentences. The puppet was able to open his treasure chest after the keys worked in all the sentences.

The children saw a card with opposites typed on it. They told the teacher which opposites matched so she could draw a line to them.

Lesson 31. The puppet explained to the children that they could get an autographed picture of Miss Sandy at any library in the city. They were encouraged to check out a book as they got a picture.

The teacher read a story about a monkey to the children. Then questions about the story were shown on the screen and the teacher and children found the answers.

On page 72 the children answered the questions which were designed to review vocabulary and comprehension skills. On page 73 they colored the numerals in the picture according to numerals and colors listed at the bottom of the page.

Lesson 32. The teacher showed the children a picture of a giant and asked them to help spell the word giant. A story was read about a giant which was followed by an exercise in which the children figured out the correct sequence of events in the story.

Visuals were shown which illustrated compound words such as a picture of children playing baseball. Then the teacher held up a card with the word baseball, and the children helped her to cut the word into two words.

On page 74 the children divided the compound words into two words. The word of the day was a giant word as the children wrote the longest word they knew. On page 75 the children drew a picture of a giant.

Lesson 33. The program began with the teacher presenting a riddle which was solved with a word that contained the blend "tr." On page 76 the children matched pictures with blends. On page 77 they completed sentences with words that began with blends.

A guest played a drum and was joined by the puppet and the children. The teacher then used a drum shaped box to pull out objects so that they could be matched with blends on the flannel-board.

Lesson 34. The teacher showed books that she had gotten from the library. Five pictures were shown of the puppet and

children at the library. The children were encouraged to send in their last postcard with a note about the number of books that they had read.

A story was read to the children which mentioned pancakes. The teacher and puppet talked about pancakes being a compound word, and the puppet spelled it. Four pictures and the matching compound words were shown to the children. On page 78 the sentences were completed with compound words. On page 79 the children read the story and answered questions at the bottom of the page.

Lesson 35. The teacher read some of the titles of books listed on postcards that had been sent to her, and others were encouraged to send her their postcards. The teacher and puppet had visited the 4-H fair, and pictures were shown of the puppet and children around various animals.

The children read a story about robins. The teacher told them three different endings, and they had to choose the one that would happen next in the story. This same activity was repeated with a story about the puppet going to a library.

On page 80 the children selected the picture that happened next in the story. On page 81 they selected the correct answer of the opposites listed. The puppet and children then matched words given by the teacher that were opposites.

Lesson 36. The teacher read a story about five mice who had long vowel sounds in their names. There were five guests who spoke for the five mice in the story written for this lesson. On page 82 the long vowel sounds were introduced with pictures and exercises. On page 83 the children had to choose an answer with a long vowel sound. On page 84 the children filled in the missing long vowel sound and illustrated the words. Each of the three pages was carefully introduced, so more time than usual was spent on the workbooks.

Words were placed on the flannelboard, and the children found the long vowel that was missing.

Lesson 37. The teacher and puppet read several titles of books sent in by children to encourage them to visit the library. A story about Rocko at his first swimming party was read to the children. On page 85 the puzzle about swimming was completed with the words listed on the page.

On page 86 the children found a sentence in each group that did not belong with the others. On page 87 the children drew

things done in each season.

A lifeguard appeared as a guest and talked about safe swimming. He showed pictures to illustrate his talk. The program ended with a riddle for the children to read.

Lesson 38. A librarian visited the reading rocket to announce that the teacher would go to all 10 libraries during the week after the television program. Her schedule was shown on the screen. The librarian then read a story to the children.

On page 88 the children were encouraged to write a story about something they did during the summer. On page 89 they filled in the ending sound. On page 90 they matched the sentence and book cover, and they illustrated a book cover on page 91.

Lesson 39. The puppet read a letter that he wrote to his parents on Jupiter. The teacher helped him to spell the words he did not know.

On page 92 the teacher read words for the children to spell. In the column at the right of the page they thought up words to spell that used the letters given. On page 93 they finished drawing the astronaut.

Lesson 40. The puppet was taken on a tour of the television station where he met all the persons who produced the program.

On page 94 the children read a story which reviewed vocabulary and comprehension skills. On page 95 they classified the objects presented in the story on page 94. They drew objects in the proper category that the puppet wanted to take home.

On page 96 they read a poem and on page 97 they followed the route of the puppet on his way home. Pages 98 and 99 were used to write a story or to list titles of books read.

The teacher thanked the children for helping the puppet to learn to read. The puppet got in his space capsule and blasted off for Jupiter as the teacher and children waved good-bye.

Figures 1-4 are pictures taken during and after the presentation of a program. In Figure 1 the television teacher and puppet are reading some of the many letters received from children during the program. In Figure 2 the teacher is using the television set to simulate starting the space ship. Attendance was kept each day, and a special system shown in Figure 3 was used so that children would have to watch the program to know how to mark their books. After the program was over each day, the teacher and members of the program staff would relax for a few minutes as shown in Figure 4 before beginning work on the program for the next day.

A total of 2342 postcards and letters were received from children during the program. The following types were received: name the puppet, 532; parent comments, 273; picture requests, 285; library books liked and read, 195; and rhymes and miscellaneous, 1057.

During the summer 518 children signed up in branches of the public library as "Rocket Readers." This club was limited to children who had just completed the first grade and who participated in the program. They checked out 5187 books or about 10 books per child. These figures do not include children who got books from bookmobiles or those whose parents or older brothers or sisters checked out books for younger children. A total of 1036 children visited with the teacher at libraries during the week after the eight weeks program.



Figure 1. Television teacher and puppet reading mail from viewers



Figure 2. Television teacher using main control panel of space ship to "blast off"

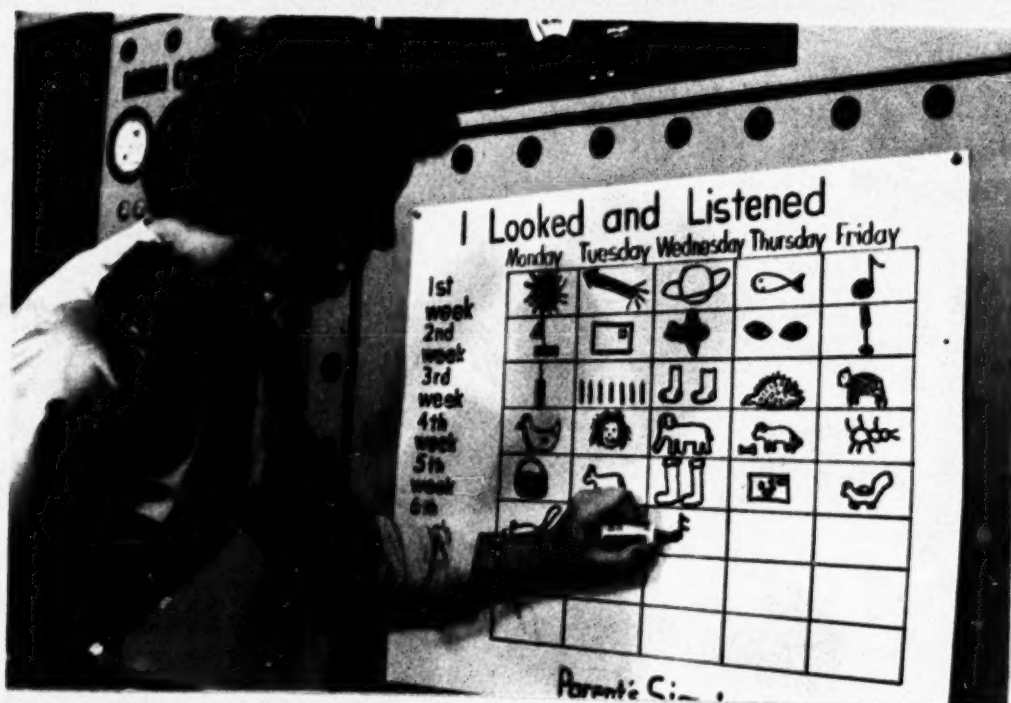


Figure 3. Children being shown by teacher how to mark attendance for Wednesday of sixth week



Figure 4. Executive producer, teacher, and puppet relax after another program

CHAPTER IV

ANALYSIS OF THE DATA AND FINDINGS

The California Reading Test, Lower Primary, and the California Short-Form Test of Mental Maturity, Primary, were administered by teachers to the control and experimental groups before the summer vacation. The tests were scored by secretaries at the school corporation's reading center, and the scores were recorded. Both groups were tested by teachers after the summer vacation, and secretaries added these scores to the records of the children. All cases were eliminated that did not have all test scores.

All information was given to the computer center of a local bank where IBM cards were punched. The cards were run on an IBM 1440 computer, and information concerning means and numbers of various groups was obtained.

The Indiana University Computer Center ran all programs involving further analysis of the data. The CDC 3400-3600 Computer System was used to run the analysis of variance and the analysis of covariance. The analysis of variance was computed using the Duncan Multiple Range Biomedical Computer Program 01V. The BMD04V analysis of covariance-multiple covariates program from the Health Sciences Computing Facility, UCLA, version of May 4, 1965, was used for the analysis of covariance (11). The number of cases exceeded the capacity of the program for covariance, so random numbers were generated by machine to eliminate a small number of cases.

Table 2 shows the means of age, I.Q., and pre-summer and post-summer reading tests for the control and experimental groups. The experimental group contained less boys and girls than did the control group. Enrollment in the first grade in September, 1964, when the control group was in the first grade was 1288 boys and 1143 girls for a total of 2431 children. Thus about 380 children were either absent or moved during the period when both tests were given. The exact number of children at the start of the testing program was probably close to 2431. Enrollment in the first grade in September, 1965, when the experimental group was in the first grade was 1342 boys and 1193 girls for a total of 2535 children. About 629 children were either absent, moved, or were enrolled in pre-primary classes which were included with the first grade figures in September, 1965.

TABLE 2. MEANS OF AGE, I.Q., AND PRE-SUMMER AND POST-SUMMER READING TESTS FOR CONTROL AND EXPERIMENTAL GROUPS

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
Number	1069	982	2051	999	907	1906
Age	7-0	7-0	7-0	7-2	7-1	7-1
I.Q.	110.57	110.10	110.34	112.92	111.59	112.28
Pre-summer						
Vocabulary	1.97	2.12	2.04	2.04	2.15	2.08
Comprehension	1.79	1.96	1.87	1.89	2.01	1.94
Total	1.95	2.10	2.02	2.01	2.13	2.06
Post-summer						
Vocabulary	1.77	1.95	1.85	1.95	2.11	2.02
Comprehension	1.71	1.97	1.83	1.88	2.11	2.04
Total	1.76	1.97	1.86	1.96	2.13	2.04

The average age of children in the experimental group was one month higher than in the control group due to a change in entrance age requirements. Children in the control group had to have their fifth birthday on or before November 1, and the children in the experimental group had to have their fifth birthday on or before October 1.

The mean I.Q. of the experimental group was higher than the control group for boys, girls, and the total group. Boys had higher average I.Q. scores than girls in both groups.

The experimental group had higher scores in all reading categories in the pre-summer tests. Both groups did better in the vocabulary test than in the comprehension test. Girls outscored boys in all areas of reading in the pre-summer tests.

In the post-summer tests, the differences between the two groups was wider than in the pre-summer tests. The control group had losses over the summer in all areas except the comprehension test for girls. The biggest loss was in the vocabulary test where there was a much larger loss than in the comprehension test. The girls outscored the boys in all areas of the post-summer control group reading tests. Girls had less loss over the summer than boys as the boys had a loss of .19 years and the girls .13 years. The total decline from a pre-summer control group score of 2.02 years to a post-summer score of 1.86 years was a loss of .16 years.

The post-summer experimental group had losses in all areas except in the comprehension and total reading scores for girls, but these losses were much less than those of the control group. The experimental group had a loss over the summer in vocabulary of .06 years and gained .10 years in comprehension.

All areas of the post-summer experimental group tests were higher than the control group post-summer tests. Boys made higher gains in the experimental group in vocabulary, comprehension, and total reading than girls, but the girls still had higher scores in all areas on the post-summer scores. There were larger differences between the comprehension means of the post-summer tests than between the post-summer vocabulary means. There was a gain for the post-summer experimental group over the post-summer control group of .17 years in vocabulary, .21 years in comprehension, and .18 years in the total reading score. Boys made up 52.1 per cent of the control group and 51.9 per cent of the experimental group.

Table 3 shows the means of age, I.Q., and pre-summer and post-summer reading tests for the low quarters of the control

TABLE 3. MEANS OF AGE, I.Q., AND PRE-SUMMER AND POST-SUMMER READING TESTS FOR LOW QUARTERS IN I.Q. OF CONTROL AND EXPERIMENTAL GROUPS

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
Number	267	245	512	228	244	472
Age	7-3	7-3	7-3	7-4	7-2	7-3
I.Q.	60.61	90.71	90.66	92.32	92.36	92.34
Pre-summer						
Vocabulary	1.61	1.72	1.66	1.69	1.69	1.67
Comprehension	1.44	1.54	1.49	1.55	1.54	1.54
Total	1.61	1.71	1.66	1.66	1.68	1.66
Post-summer						
Vocabulary	1.45	1.56	1.50	1.57	1.68	1.63
Comprehension	1.44	1.59	1.51	1.48	1.68	1.63
Total	1.45	1.58	1.51	1.58	1.69	1.63

and experimental groups according to I.Q. There was a smaller per cent of boys in both the control and experimental groups compared to the entire population as shown in Table 2. There were 50.1 per cent boys in the control group and 48.3 per cent boys in the experimental group.

The average age of the children in the low quarter was higher than the total group as the control group was four months older and the experimental group three months older than the average for the total population. The boys in the experimental group were an average of two months older than the girls.

The average I.Q. for the experimental group was higher than the control group as shown for the total population in Table 2.

The pre-summer control and experimental groups scored higher in vocabulary than in comprehension as in the total group. The pre-summer experimental group boys scored higher than the control group boys while the control group girls outscored the experimental group girls.

The biggest loss over the summer for the control group was in the vocabulary test where there was a total loss of .16 years. The control group gained .02 years in comprehension. The total loss over the summer for the control group boys and girls was .15 years.

The experimental group made its biggest gain over the summer in vocabulary. There were losses in all areas except in the comprehension and total reading scores for girls and in the total comprehension scores for boys and girls. The post-summer experimental group scores were higher in all reading areas than those of the post-summer control groups. The largest gains were made in the vocabulary tests. Boys made larger gains than girls. There was a gain for the post-summer experimental group over the post-summer control group of .13 years in vocabulary, .12 years in comprehension, and .12 years in total reading.

Table 4 shows the means of age, I.Q., and pre-summer and post-summer reading tests for the high quarters of the control and experimental groups according to I.Q. There was a larger per cent of boys in the upper quarter groups than in the total or lower quarter groups as 53.9 per cent of the upper quarter control group and 54.4 per cent of the experimental group were boys. The children in the upper quarter were younger than the total group in Table 2. The average age was one month less than for the entire group in Table 2. The average I.Q. in the upper quarter experimental group was slightly higher than the control group. The boys had a higher average I.Q. than girls in both the experimental and control groups.

TABLE 4. MEANS OF AGE, I.Q., AND PRE-SUMMER AND POST-SUMMER READING TESTS FOR HIGH QUARTERS IN I.Q. OF CONTROL AND EXPERIMENTAL GROUPS

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
Number	282	241	523	265	222	487
Age	6-11	6-10	6-11	7-0	7-0	7-0
I.Q.	131.13	130.89	131.02	131.61	131.53	131.57
Pre-summer						
Vocabulary	2.34	2.54	2.44	2.32	2.54	2.42
Comprehension	2.14	2.43	2.27	2.25	2.51	2.36
Total	2.31	2.54	2.41	2.32	2.54	2.42
Post-summer						
Vocabulary	2.14	2.38	2.25	2.28	2.49	2.37
Comprehension	2.08	2.45	2.25	2.29	2.62	2.44
Total	2.13	2.43	2.26	2.33	2.57	2.44

In the pre-summer tests the girls scored better than boys in all areas for both the control and experimental groups. Scores were higher on the vocabulary test than on the comprehension test for boys and girls in both groups. The pupils in the control group were superior in pre-summer tests in vocabulary scores for boys and in the total vocabulary scores. The experimental group scored higher in all areas of comprehension and in total reading for boys and for all pupils combined.

In the post-summer tests the children in the control group had lower scores than in pre-summer tests in all areas except comprehension scores for girls. More loss was made in vocabulary scores than in comprehension. The experimental group made gains over the summer in all areas of comprehension and in total reading scores. There was a slight loss in each area of the vocabulary scores.

The post-summer experimental group had higher scores in all test areas for both boys and girls than did the post-summer control group. The biggest gains were made on the comprehension tests. Boys made bigger gains in vocabulary, comprehension, and total scores than did the girls. There was a gain by the experimental group over the control group in post-summer scores of .12 years in vocabulary, .19 years in comprehension, and .18 years in the total reading score.

Table 5* shows the means for the boys in their pre-summer and post-summer reading and intelligence tests. The experimental groups scored higher in all pre-summer and post-summer reading and intelligence tests. The experimental groups scored higher in all pre-summer and post-summer reading tests. The difference between the post-summer groups was larger than the pre-summer difference.

Tables 6 to 8 show that there was a significant difference in the analysis of variance between the control and experimental pre-summer groups of boys in vocabulary, $p < .01$, comprehension, $p < .01$, and total reading, $p < .05$. The groups grew wider apart as shown in tables 9 to 11 where the F figures were higher for the post-summer control and experimental scores. There was a more significant difference in vocabulary, $p < .001$, comprehension, $p < .001$, and total reading, $p < .001$. There was also a significant difference between the means of the I.Q. scores for the two groups, $p < .001$.

Table 13 shows the means for the girls in their pre-summer

*See Appendix B for tables 5 to 26.

and post-summer reading and intelligence tests. The experimental groups were superior in reading before and after the program and had higher I.Q. scores. The differences between the groups grew after the summer program.

Tables 14 to 16 show the analysis of variance for the means of the pre-summer tests for the girls. While there were higher scores for the experimental group in all areas, none of the differences was significant.

Tables 17 to 19 show that there was a significant difference between the groups after the program in vocabulary, $p < .001$, comprehension, $p < .001$, and total reading, $p < .001$. Table 20 shows that there was a significant difference between the groups in intelligence, $p < .05$.

Analysis of variance revealed a significant difference in intelligence between the groups as well as a significant difference in the pre-summer reading tests for boys. The number of cases of boys and girls in each group was reduced by random sample to allow the BMD04V analysis of covariance program to be used so that the differences in the starting point for both reading achievement and I.Q. could be corrected.

The analysis of covariance for boys of the post-summer vocabulary test adjusted for the pre-summer vocabulary test and I.Q. as shown in Table 21 revealed that there was a significant gain, $F = 158.033$, $p < .001$, during the summer months for the boys. Tables 22 and 23 show similar gains for the boys in comprehension, $F = 105.340$, $p < .001$, and total reading, $F = 67.649$, $p < .001$. The fact that the F for total reading is smaller than for vocabulary or comprehension suggests that the summer television program influenced the vocabulary but not the comprehension of some boys and the comprehension but not the vocabulary scores for other boys. When the scores are combined for vocabulary and comprehension into total reading, the effects seem to be slightly weakened.

The analysis of covariance for girls of the post-summer vocabulary test adjusted for the pre-summer vocabulary test and for I.Q. as shown in Table 24 revealed that there was a significant gain, $F = 22.729$, $p < .001$, for the girls in vocabulary during the summer. Tables 25 and 26 show that there was also a significant gain for the girls in comprehension, $F = 11.306$, $p < .001$, and in the total reading score, $F = 22.369$, $p < .001$.

The F was larger for both boys and girls in the vocabulary test than in the comprehension test. The television program appeared to have an especially strong effect on boys as all

outcomes were higher than those for girls.

The children in the experimental group were asked by their second grade teachers to return their books to school so that the number of days watched could be recorded. Table 27 shows the means for the pre-summer and post-summer reading tests and intelligence tests for the experimental group according to the number of days the program was watched. Group 1 watched 21 to 40 days, Group 2 did not return their books and may or may not have watched the program, and Group 3 returned their books and watched 0 to 20 days.

Group 1 had higher pre-summer scores in all reading tests and in I.Q. than Group 2 or Group 3. Group 3 had higher pre-summer scores in all reading tests and in I.Q. than Group 2. The vocabulary scores were higher than the comprehension scores for all three pre-summer groups.

The means in all post-summer reading tests for Group 1 were higher than pre-summer scores for the same group. The largest gain, .1875 years, was made in the comprehension test. Group 2 lost in all reading areas over the summer with the biggest loss in vocabulary. Group 3 also lost in all reading areas, but the highest loss was in the comprehension test. Group 2 had less loss than Group 3 during the summer.

Table 28* shows the analysis of variance for the means of the pre-summer vocabulary test for the experimental groups 1, 2, and 3. There was a significant difference, $F = 47.0327$, $p < .001$, between the groups. Tables 29 and 30 show that significant differences were found in comprehension, $F = 33.7230$, $p < .001$, and in total reading, $F = p < .001$.

Table 31 shows the analysis of variance for the means of the post-summer vocabulary test for Groups 1, 2, and 3. The difference was wider than in the pre-summer vocabulary test, $F = 102.1042$, $p < .001$. The differences were significant and wider than pre-summer scores for comprehension, $F = 93.0457$, $p < .001$, and in total reading, $F = 106.3714$, $p < .001$, as shown in Tables 32 and 33.

Table 34 shows that there was a significant difference between I.Q. scores for the groups, $F = 34.5893$, $p < .001$. The data indicate that children who watched over half of the summer television programs had higher intelligence scores, better

*See Appendix B for Tables 28 to 37.

TABLE 27. MEANS FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED

	Group 1*	Group 2	Group 3
	n = 795	n = 818	n = 293
Pre-summer			
Vocabulary	2.2240	1.9329	2.1751
Comprehension	2.0789	1.7967	2.0205
Total	2.2024	1.9093	2.1468
Post-summer			
Vocabulary	2.2526	1.8120	1.9898
Comprehension	2.2664	1.7292	1.9648
Total	2.2834	1.8178	1.9973
I. Q.	115.32	109.07	113.03

*Group 1 returned books and watched 21 or more days, Group 2 did not return books, Group 3 returned books and watched 20 days or less.

pre-summer and post-summer reading scores in vocabulary, comprehension, and total reading, and made gains in reading ability in all reading areas during the summer while the average in reading scores for the other groups declined during the summer months.

Table 35 shows the multi t values for the pre-summer and post-summer reading tests and intelligence tests for experimental Groups 1 and 2. There was a significant difference, $p < .001$, in all pre-summer and post-summer reading tests and in I.Q. The means of all areas were wider on the post-summer tests.

Table 36 shows the multi t values for pre-summer and post-summer reading tests and intelligence tests for experimental Groups 1 and 3. None of the 6 scores was significant on the pre-summer tests. All post-summer tests were significant, $p < .001$, which indicate that the groups got wider apart on the post-summer tests. There was a significant difference in I.Q. between the groups, $p < .01$.

Table 37 shows the multi t values for the pre-summer and post-summer reading and intelligence tests for experimental Groups 2 and 3. There was a significant difference, $p < .001$, in all pre-summer and post-summer reading tests and in I.Q. The groups were closer together on the post-summer scores than on the pre-summer scores.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Conclusions

The following conclusions are based on information reported throughout the study and specifically data in Chapter I concerning availability of television sets and television viewing interests, in Chapter III related to use of library facilities, and in Chapter IV in the results of the analysis of the data. All of the conclusions concern children in the Evansville-Vanderburgh School Corporation who had just completed the first grade.

1. Most of the children who complete the first grade have television sets in their homes.
2. The favorite television programs of the children are "adult" or family shows presented during prime television rather than children's programs.
3. Boys and girls have significant losses in reading ability during the summer vacation months.
4. Girls have less loss during summer vacations than boys.
5. Girls have higher reading scores than boys at the end of the first grade.
6. There is an equal loss in reading ability for the upper and lower quarters based on I.Q., but the per cent of loss is greater for the lower quarter during the summer months.
7. The summer television program significantly increased library usage during the summer.
8. Boys and girls made significant gains in vocabulary, comprehension, and total reading as a result of the summer television program as compared to boys and girls who had no formal reading program during the summer.
9. Children who watched over half of the television programs had higher I.Q. and reading scores at the end of the first grade and made significant gains in all reading tests as compared to those children who did not watch over half of the programs or who did not return their books to school.
10. The television program had an especially strong effect

on boys as all outcomes for the total group and for the upper and lower quarters were higher for boys than for girls.

Implications

The findings of the study show that there is normally a significant loss in reading ability by children during the summer vacation after the first grade. The results suggest that many parents do not utilize library facilities or encourage reading for their children during the summer months.

Even with the availability of activity books and a summer television program, help and encouragement is needed by children from their parents to sustain the interest necessary to benefit from the program. As in most good reading programs, cooperation of the home and school will usually result in better reading achievement for children.

The results of the study show that boys, despite having a higher average intelligence than girls, do not achieve as well as girls in reading during the first year of school. When the content of a program is aimed at the interests of boys, for example the summer television program with its space theme and boy puppet, boys achieve better than girls. As several authors indicated in the related research, beginning reading materials should be especially concerned with the interests of boys.

Summer television is helpful in maintaining reading achievement during the summer. Good teachers are available, children watch television frequently and enjoy learning using the medium, and post-first grade children during the summer are not overburdened with other studies and activities. The cost of a summer television program is much less expensive than normal reading programs. A much larger per cent of the children participated in the television program than has been reported in summer reading programs held in regular classrooms.

Recommendations

The summer television reading program for children who have just completed the first grade should be continued in the Evansville, Indiana, area. Children from other area schools should be given the opportunity to participate in the program.

Programs can be developed in other communities utilizing the activity book developed in the project as well as the detailed pre-program and daily program suggestions.

Television tapes can be developed which could be loaned to schools by National Educational Television and which could include the use of the activity books.

Additional research is needed with older children to determine summer loss in reading and possible gains through the use of television.

CHAPTER VI

SUMMARY

First grade children are given special attention in reading programs throughout the United States. School superintendents realize the importance of the first grade teacher and are careful to appoint well qualified persons to teach beginning reading. The U.S. Office of Education has supported major projects to determine effective ways to help first grade children to learn to read. Most of the books provided for first grade children are either reading books or reading workbooks.

The Problem. At the end of the critical first grade program, children leave school for the long summer vacation where many of them do little reading. Six and seven year old children usually cannot go to libraries by themselves, and there are comparatively fewer books in most homes for these children than for older pupils in upper grades. Most school systems do not operate summer reading classes for children leaving the first grade, so it would seem that reading skills might not increase over the summer and might even be lower when school would start in the fall. The purpose of this study was to determine the amount of loss that occurs during the summer and to see if a television reading program would prevent loss in reading.

Objectives. The objectives of this study involving children during the summer after the first grade were as follows:

1. To determine the reading loss or gain of first grade children during the summer of 1965 and 1966.
 - a. To find the loss or gain of boys and girls.
 - b. To find the loss or gain of the upper and lower intelligence quarters.
2. To develop and and present a summer reading program by television.
3. To test the null hypothesis that there is no difference between the means of reading achievement tests taken by children who did and who did not participate in a summer television program.

Procedure. A steering committee was formed at the beginning of the project. The purpose of the committee was to approve the various phases of the project as well as to give suggestions and comments concerning plans for each phase. It was composed of the superintendent, assistant superintendent in charge of

instruction, director of elementary education, director of educational television, accounting supervisor, primary supervisor, and the director of the project.

After the formation of the steering committee in January, 1965, the California Reading Test, Lower Primary, Forms W and X, 1963 norms, and the California Short-Form Test of Mental Maturity, Primary, 1957 S-Form, 1958 norms, were purchased so that all forms would be available for the experimental and control groups. In May, first and second grade teachers met together for a presentation on the entire research project including how to administer the reading and intelligence tests.

The tests were administered to the control and experimental groups during the same weeks in May and September of 1965 and 1966. The teachers had one week to give the tests and to return them to the reading center. Most of the tests were given on Tuesday or Wednesday. Written instructions were sent to teachers during the second year of the project as no general meeting seemed necessary. Since no scoring or reading of norms had to be done by teachers, the testing of pupils was a relatively easy task. All teachers received copies of the manual so that they could administer the test properly. The directions in the manuals were clear and easy to follow. All tests were returned to the reading center where secretaries did all scoring.

A book was needed by each child to get him actively involved in the program, to help him become enthusiastic about the program through ownership of a special summer book, and to provide skill lessons to be completed as introduced by the television teacher.

Eight first and second grade teachers including the television teacher plus the primary supervisor wrote the lessons in the activity book during the summer of 1965 following a rough outline developed prior to the workshop. These teachers were of different ages and had taught and had been taught with a variety of methods, so they were able to present many different methods and ideas for consideration by the group.

The content of the book was based on the judgment of the workshop participants who knew the problems of first and second grade children and who were aware of the summer loss and resulting fall reading deficiencies. They were concerned about the attitudes of children and suggested fun pages. They knew that many children forget the names and sounds of letters over the summer and that there is confusion about letters such as "b" and "d." Possessives, blends, recreational reading, and other reading skills were included in the final draft.

The title of the activity book, Ride the Reading Rocket, was selected because of the high interest in space activities by both boys and girls. A special feature was a space creature who was named Rocko by the children at the beginning of the program.

The alphabet was placed on the inside of the front cover as a reference for making correct letters in the book. In the back of the book were pages to record attendance and books read. Addressed postcards were placed in the book for children and parents to mail to the television teacher. They were used to send in a name for the puppet, the name of the book liked best, comments by parents, and other information.

Other pages featured puzzles, coloring, and writing letters and words. Blanks for 40 words of the day were spaced throughout the book. Numerals were spelled and written on the bottom of each page. A note to parents was placed in the front of the book to give them directions on how to help their child during the summer.

The lessons in the activity book were designed so that children could not do most of them without direction from the teacher so that lessons would be done correctly at the right time.

The vocabulary used in the activity book was generally restricted to words normally introduced in the first grade with other words used as necessary to develop lessons about special topics. The skills involved in the lessons were those normally used in the first grade by the regular classroom teachers. They were planned to motivate the listener, to give practice in word-study and the comprehension skills, to provide a review of the first grade vocabulary, to introduce additional sight words, to develop the ability to follow directions, to furnish opportunities for self-direction, and to stimulate creative expression.

The activity book was illustrated and printed during the winter and spring months. During this time a puppet was designed to be used daily in the program. The purpose of the puppet was to capitalize on the inherent interest that children have in puppets as well as to have someone to assist with the pacing of the program. Pictures of the puppet were also used throughout the activity book.

The television set was designed as the inside of a space ship and included control knobs, chalkboard, flannel board, and space for mounting materials. The costume of the teacher was a space suit which was designed to show up on black and white television similar to space suits in the U. S. space program.

The teacher was given a week's leave of absence to work at the educational station. She was given a complete orientation by the executive producer of the summer program, worked in the control room, and observed teachers preparing and presenting programs. The television teacher presented an in-service television program to area teachers on her last day at the station. She described the program to teachers, emphasized the importance of the project, and reviewed the role of teachers in gathering data and preparing children for the summer reading class.

Some children knew of the summer reading program prior to the spring of 1966 through newspaper and television publicity, but a massive campaign was needed to get the support of children and parents. Signs were printed and sent to all first grade teachers for display on bulletin boards. Many of the teachers made special bulletin board displays featuring the program as well as the need for summer reading.

Several newspaper stories and television programs were presented to the public just before the beginning of the telecast. Visits were made to a large number of classrooms by the television teacher to build enthusiasm for the program.

On Thursday of the last week of school, a 15 minute television program was presented to all first graders. The children met the teacher, Miss Sandy, and learned about the exciting activities of the summer television program. The children met the puppet and were invited to help select a name for him by sending their suggestions on the postcards in the activity book. Activity books were distributed to children, and their use with the program was described so pupils would not work ahead prior to directions being given with each lesson. The beginning date, time, and channel were emphasized at the end of the presentation.

The next 15 minutes of television time involved only parents who had been notified earlier in the week to observe the entire 30 minutes. Parents were given information concerning the need for the program as well as how they could help by getting children up on time, by seeing that children had crayons and pencils to work with, and by helping them understand directions when necessary. The importance of recreational reading was emphasized, and parents were encouraged to take children to the library. Parents were asked to be interested in the activity book which was to be brought home by the child that evening, and they were reminded of the starting date and time.

The theme of the summer television program was a space trip to Jupiter with Miss Sandy as the pilot and a puppet who was named Rocko by the children and who was trying to learn to read. All

scenes took place on the rocket ship except that guests from Earth could be zeroed in through special machines and presented to the children.

Each day the children from one of the schools were taken on an imaginary rocket ride. The school was mentioned by name and all of the pupils were invited to climb aboard.

A word of the day was written each day on the chalkboard by the teacher and in the activity book by the children. The word selected related to the lesson presented that day.

The attendance page was illustrated by the children rather than filled with X's or colored in. A simple picture relating to the day's lesson was drawn by the teacher, and the children made similar pictures for their books. For example, they drew a lamb the day one was shown on the program.

Most of the pages in the activity book were designed so that children could not work them without directions from the teacher. Each day's lesson was planned so that there would be entertainment for the children as well as skill lessons.

Most of the children had television sets in their homes. In the spring of 1965, 97.5 per cent of 2395 first grade children out of 2455 had television sets in their homes. A higher figure was found in 1966 when 98.7 or 2300 out of 2330 children surveyed had television sets.

In 1965, 24 of the 60 children without television sets were able to view programs in the homes of neighbors or relatives. In 1966, 17 out of the 30 without television sets were able to view the program in other homes, so only 13 children out of 2330 or one-half of one per cent were without television sets.

A survey made in May, 1966, to determine the favorite television programs of first grade children in the Evansville-Vanderburgh School Corporation revealed that the majority liked "adult" or family shows presented during prime television time rather than children's programs.

A total of 2342 postcards and letters were received from children during the program. The following types were received: name the puppet, 532; parent comments, 273; picture requests, 285; library books liked and read, 195; and rhymes and miscellaneous, 1057.

During the summer 518 children signed up in branches of the public library as "Rocket Readers." This club was limited to

children who had just completed the first grade and who participated in the program. They checked out 5187 books or about 10 books per child. These figures do not include children who got books from bookmobiles or those whose parents or older brothers or sisters checked out books for younger children. A total of 1036 children visited with the teacher at libraries during the week after the eight weeks program.

All test information for both groups was given to the computer center of a local bank where IBM cards were punched. The cards were run on an IBM 1440 computer, and information concerning means and number of various groups was obtained. The Indiana University Computer Center ran all programs involving further analysis of the data. The CDC3400-3600 Computer System was used to run the analysis of variance and the analysis of covariance. The analysis of variance was computed using the Duncan Multiple Range Biomedical Computer Program 01V. The BMD04V analysis of covariance-multiple covariates program from the Health Sciences Computing Facility, UCLA, version of May 4, 1965, was used for the analysis of covariance. The number of cases exceeded the capacity of the program for covariance, so random numbers were generated by machine to eliminate a small number of cases.

The experimental group contained less boys and girls than did the control group. The average age of children in the experimental group was one month higher than in the control group due to a change in entrance age requirements. The mean I.Q. of the experimental group was higher than the control group for boys, girls, and the total group. Boys had higher average I.Q. scores than girls in both groups.

The experimental group had higher scores in all reading categories in the pre-summer tests. Both groups did better in the vocabulary test than in the comprehension test. Girls outscored boys in all areas of reading in the pre-summer tests.

In the post-summer tests, the differences between the two groups was wider than in the pre-summer tests. The control group had losses over the summer in all areas except the comprehension test for girls. The biggest loss was in the vocabulary test where there was a much larger loss than in the comprehension test. The girls outscored the boys in all areas of the post-summer control group reading tests. Girls had less loss over the summer than boys as the boys had a loss of .19 years and the girls .13 years. The total decline from a pre-summer control group score of 2.02 years to a post-summer score of 1.86 years was a loss of .16 years.

The post-summer experimental group had losses in all areas

except in the comprehension and total reading scores for girls, but these losses were much less than those of the control group. The experimental group had a loss over the summer in vocabulary of .05 years and gained .10 years in comprehension.

All areas of the post-summer experimental group tests were higher than the control group post-summer tests. Boys made higher gains in the experimental group in vocabulary, comprehension, and total reading than girls, but the girls still had higher scores in all areas on the post-summer scores. There were larger differences between the comprehension means of the post-summer tests than between the post-summer vocabulary means. There was a gain for the post-summer experimental group over the post-summer control group of .17 years in vocabulary, .21 years in comprehension, and .18 years in the total reading score. Boys made up 52.1 per cent of the control group and 51.9 per cent of the experimental group.

In the low quarters of the control and experimental groups according to I.Q., there was a smaller per cent of boys in both the control and experimental groups compared to the entire population. There were 50.1 per cent boys in the control group and 48.3 per cent boys in the experimental group.

The average age of the children in the low quarter was higher than the total group as the control group was four months older and the experimental group three months older than the average for the total population. The boys in the experimental group were an average of two months older than the girls.

The average I.Q. for the experimental group was higher than the control group as in the total population.

The pre-summer control and experimental groups scored higher in vocabulary than in comprehension as in the total group. The pre-summer experimental group boys scored higher than the control group boys while the control group girls outscored the experimental group girls.

The biggest loss over the summer for the low quarter control group was in the vocabulary test where there was a total loss of .16 years. The control group gained .02 years in comprehension. The total loss over the summer for the control boys and girls was .15 years.

The experimental group made its biggest gain over the summer in vocabulary. There were losses in all areas except in the comprehension and total reading scores for girls and in the total comprehension scores for boys and girls. The post-summer

experimental group scores were higher in all reading areas than those of the post-summer control groups. The largest gains were made in the vocabulary tests. Boys made larger gains than girls. There was a gain for the post-summer experimental group over the post-summer control group of .13 years in vocabulary, .12 years in comprehension, and .12 years in total reading.

There was a larger per cent of boys in the upper quarter according to I.Q. than in the total or lower quarter groups as 53.9 per cent of the upper quarter control group and 54.4 per cent of the experimental group were boys. The children in the upper quarter were younger than the total group. The average I.Q. in the upper quarter experimental group was slightly higher than the control group. The boys had a higher average I.Q. than girls in both the experimental and control groups.

In the pre-summer tests the girls scored better than boys in all areas for both the control and experimental groups. Scores were higher on the vocabulary test than on the comprehension test for boys and girls in both groups. The pupils in the control group were superior in pre-summer tests in vocabulary scores for boys and in the total vocabulary scores. The experimental group scored higher in all areas of comprehension and in total reading for boys and for all pupils combined.

In the post-summer tests the children in the control group had lower scores than in pre-summer tests in all areas except comprehension scores for girls. More loss was made in vocabulary scores than in comprehension. The experimental group made gains over the summer in all areas of comprehension and in the total reading scores. There was a slight loss in each area of the vocabulary scores.

The post-summer experimental group had higher scores in all test areas for both boys and girls than did the post-summer control group. The biggest gains were made on the comprehension tests. Boys made bigger gains in vocabulary, comprehension, and total scores than did the girls. There was a gain by the experimental group over the control group in post-summer scores of .12 years in vocabulary, .19 years in comprehension, and .18 years in the total reading scores.

The means for the boys in their pre-summer and post-summer reading and intelligence tests showed that the experimental groups scored higher in all pre-summer and post-summer reading and intelligence tests. The experimental groups scored higher in all pre-summer and post-summer reading tests. The difference between the post-summer groups was larger than the pre-summer difference..

There was a significant difference shown in the analysis of variance between the control and experimental pre-summer groups of boys in vocabulary, $p < .01$, comprehension, $p < .01$, and total reading, $p < .05$. The groups grew wider apart in the post-summer tests where there was a more significant difference in vocabulary, $p < .001$, comprehension, $p < .001$, and total reading, $p < .001$. There was also a significant difference between the means of the I.Q. scores for the two groups, $p < .001$.

The means of the girls in their pre-summer and post-summer reading and intelligence tests showed that the experimental group was superior in all areas. The differences between the reading scores of the groups grew after the summer program.

Analysis of variance for the means of the pre-summer reading tests for the girls showed that none of the differences was significant, but there were higher scores for the experimental group in all areas. In the post-summer tests there was a significant difference in vocabulary, $p < .001$, comprehension, $p < .001$, and total reading, $p < .001$. There was a significant difference between the groups in intelligence, $p < .05$.

Analysis of variance revealed a significant difference in intelligence between the groups as well as a significant difference in the pre-summer reading tests for boys. The number of cases of boys and girls in each group was reduced by random sample to allow the BMD04V analysis of covariance program to be used so that the differences in the starting point for both reading achievement and I.Q. could be corrected.

The analysis of covariance for boys of the post-summer vocabulary test adjusted for the pre-summer vocabulary test and I.Q. revealed that there was a significant gain, $F = 158.033$, $p < .001$, during the summer months. Similar gains were made in comprehension, $F = 105.340$, $p < .001$, and total reading, $F = 67.649$, $p < .001$. The fact that the F for total reading is smaller than for vocabulary or comprehension suggests that the summer television program influenced the vocabulary but not the comprehension of some boys and the comprehension but not the vocabulary scores for other boys. When the scores are combined for vocabulary and comprehension into total reading, the effects seem to be slightly weakened.

The analysis of covariance for girls of the post-summer vocabulary test adjusted for the pre-summer vocabulary test and for I.Q. revealed that there was a significant gain, $F = 22.729$, $p < .001$, for the girls in vocabulary during the summer. There was also a significant gain for the girls in comprehension $F = 11.306$, $p < .001$, and in the total reading score, $F = 22.269$, $p < .001$.

The F was larger for both boys and girls in the vocabulary test than in the comprehension test. The television program appeared to have an especially strong effect on boys as all outcomes were higher than those for girls.

The children in the experimental group were asked by their second grade teachers to return their books to school so that the number of days watched could be recorded. The children were divided into three groups according to the number of days watched. Group 1 watched 21 to 40 days, Group 2 did not return their books and may or may not have watched the program, and Group 3 returned their books and watched 0 to 20 days. There were 795 children in Group 1, 818 in Group 2, and 293 in Group 3.

Group 1 had higher pre-summer scores in all reading tests and in I.Q. than Group 2 or Group 3. Group 3 had higher pre-summer scores in all reading tests and in I.Q. than Group 2. The vocabulary scores were higher than the comprehension scores for all three pre-summer groups.

The means in all post-summer reading tests for Group 1 were higher than pre-summer scores for the same group. The largest gain, .1875 years, was made in the comprehension test. Group 2 lost in all reading areas over the summer with the biggest loss in vocabulary. Group 3 also lost in all reading areas, but the highest loss was in the comprehension test. Group 2 had less loss than Group 3 during the summer.

Analysis of variance for the means of the pre-summer vocabulary test for experimental groups 1, 2, and 3, showed that there was a significant difference, $F = 47.0327$, $p < .001$, between the groups. Significant differences were also found in comprehension, $F = 33.7230$, $p < .001$, and in total reading, $F = p < .001$.

The analysis of variance for the means of the post-summer vocabulary test for groups 1, 2, and 3 showed that the difference was wider than in the pre-summer vocabulary test, $F = 102.1042$, $p < .001$. The differences were significant and wider than pre-summer scores for comprehension, $F = 93.0457$, $p < .001$, and in total reading, $F = 106.3714$, $p < .001$.

There was a significant difference between I.Q. scores for the groups, $F = 34.5893$, $p < .001$. The average I.Q. for Group 1 was 115.32, 109.07 for Group 2, and 113.03 for Group 3. The total reading means for the pre-summer groups were 2.2024 for Group 1, 1.9093 for Group 2, and 2.1468 for Group 3. The post-summer reading means were 2.2834 for Group 1, 1.8178 for Group 2, and 1.9973 for Group 3.

The data indicate that children who watched over half of the summer television programs had higher intelligence scores, better pre-summer and post-summer reading scores in vocabulary, comprehension, and total reading, and made gains in reading ability in all reading areas during the summer while the average in reading scores for the other groups declined during the summer months.

Implications. The findings of the study show that there is normally a significant loss in reading ability by children during the summer vacation after the first grade. The results suggest that many parents do not utilize library facilities or encourage reading for their children during the summer months.

Even with the availability of activity books and a summer television program, help and encouragement is needed by children from their parents to sustain the interest necessary to benefit from the program. As in most good reading programs, cooperation of the home and school will usually result in better reading achievement for children.

The results of the study show that boys, despite having a higher average intelligence than girls, do not achieve as well as girls in reading during the first year of school. When the content of a program is aimed at the interests of boys, for example the summer television program with its space theme and boy puppet, boys achieve better than girls. As several authors indicated in the related research, beginning reading materials should be especially concerned with the interests of boys.

Summer television is helpful in maintaining reading achievement during the summer. Good teachers are available, children watch television frequently and enjoy learning using the medium, and post-first grade children during the summer are not overburdened with other studies and activities. The cost of a summer television program is much less expensive than normal reading programs. A much larger per cent of the children participated in the television program than has been reported in summer reading programs held in regular classrooms.

Recommendations. The summer television reading program for children who have just completed the first grade should be continued in the Evansville, Indiana, area. Children from other schools should be given the opportunity to participate in the program.

Programs can be developed in other communities utilizing the activity book developed in the project as well as the detailed pre-program and daily program suggestions.

Television tapes can be developed which could be loaned to schools by National Educational Television and which could include the use of the activity books.

Additional research is needed with older children to determine summer loss in reading and possible gains through the use of television.

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Appendix A

Studio Teacher Evaluation Report

SOUTHWESTERN INDIANA EDUCATIONAL TELEVISION COUNCIL

Teaching via Television

STUDIO TEACHER EVALUATION SHEET

Teachers should be evaluated on a scale of five points. Highest rating starts with one, second highest two and so on to the lowest rating which would be five. Please circle the number that in your opinion rates the teacher on that particular criterion.

1. Name of Teacher: _____
2. Submitted by: _____
3. Subject Field: _____
4. Grade Level: _____
5. Code Number: _____

CRITERIA:

- | | |
|----------------------|--|
| 1. APPEARANCE: | Posture, hair, dress, ornaments, teeth.
1 - 2 - 3 - 4 - 5 |
| 2. VOICE: | Pitch, basic quality, pronounced accent, nasal.
1 - 2 - 3 - 4 - 5 |
| 3. TEACHING ABILITY: | Understanding of age level; ability to establish a purpose, and use and secure interest; ability to present content accompanying learning activities; ability to summarize and evaluate; ability to relate content to ongoing programs.
1 - 2 - 3 - 4 - 5 |

4. MANNERISMS: Gestures, facial expressions, tics, nervousness, obtruding mannerisms that would detract attention from the lesson.
1 - 2 - 3 - 4 - 5
5. SPONTANEITY: Humor, ease, animation, vivacity, happening for the first time, exuberance.
1 - 2 - 3 - 4 - 5
6. PACING: Change of subject, speed of presentation, flexibility, pausing.
1 - 2 - 3 - 4 - 5
7. ABILITY TO COMMUNICATE: Ability to communicate beyond the screen, projection, sincerity, talk with, not to, the class.
1 - 2 - 3 - 4 - 5
8. SUBJECT MATTER: Well organized, material must have substance, know material well, dominates material, subject matter does not stand in the way of presentation.
1 - 2 - 3 - 4 - 5
9. TACT: Vocabulary, false sentimentality, vulgarity, risqueness.
1 - 2 - 3 - 4 - 5
10. USE OF THE MEDIUM: Studio facilities serve teacher, works well with director, imagination, constantly striving to make the most of the medium.
1 - 2 - 3 - 4 - 5
11. COMMANDING ATTENTION: Opening remarks gets attention, ends with children wanting more, using attention material, use of camera changes.
1 - 2 - 3 - 4 - 5

12. PERSONALITY: Dynamic, ingratiating, sincerity.
1 - 2 - 3 - 4 - 5
13. LANGUAGE: Clarity, grammar, appropriateness of
vocabulary.
1 - 2 - 3 - 4 - 5
14. FINAL RATING: 1 - 2 - 3 - 4 - 5
15. COMMENTS:

Appendix B
Tables

TABLE 5. MEANS FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR BOYS

	Control	Experimental
	n = 1069	n = 999
Pre-summer		
Vocabulary	1.9683	2.0384
Comprehension	1.7903	1.8902
Total	1.9480	2.0122
Post-summer		
Vocabulary	1.7698	1.9463
Comprehension	1.7057	1.8790
Total	1.7599	1.9566
I.Q.	110.57	112.92

TABLE 6. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER VOCABULARY TEST
FOR BOYS

	SS	df	MS	F	P
Between groups	254.1277	1	254.1277	6.9230	<.01
Within groups	75837.8931	2066	36.7076		
TOTAL	76092.0208	2067			

TABLE 7. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER COMPREHENSION
TEST FOR BOYS

	SS	df	MS	F	P
Between groups	515.5705	1	515.5705	10.6672	<.01
Within groups	99854.2685	2066	48.3322		
TOTAL	100369.8390	2067			

TABLE 8. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER TOTAL READING FOR BOYS

	SS	df	MS	F	P
Between groups	213.0001	1	213.0001	6.2043	< .05
Within groups	70927.9187	2066	34.3310		
TOTAL	71140.9188	2067			

TABLE 9. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER VOCABULARY TEST FOR BOYS

	SS	df	MS	F	P
Between groups	1609.8473	1	1609.8473	41.8907	< .001
Within groups	79395.8215	2066	38.4297		
TOTAL	81005.6687	2067			

TABLE 10. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER COMPREHENSION TEST FOR BOYS

	SS	df	MS	F	P
Between groups	1550.4330	1	1550.4330	27.8206	< .001
Within groups	115137.3750	2066	55.7296		
TOTAL	116687.8080	2067			

B-4

TABLE 11. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER TOTAL READING TEST FOR BOYS

	SS	df	MS	F	P
Between groups	1997.7736	1	1997.7736	51.8099	< .001
Within groups	79664.2936	2066	38.5597		
TOTAL	81662.0672	2067			

TABLE 12. ANALYSIS OF VARIANCE FOR MEANS OF INTELLIGENCE TESTS FOR BOYS

	SS	df	MS	F	P
Between groups	2864.2591	1	2864.2591	11.4949	<.001
Within groups	514799.3980	2066	249.1769		
TOTAL	517663.6571	2067			

TABLE 13. MEANS FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR GIRLS

	Control	Experimental
	n = 982	n = 907
Pre-summer		
Vocabulary	2.1178	2.1501
Comprehension	1.9647	2.0133
Total	2.0974	2.1295
Post-summer		
Vocabulary	1.9533	2.1076
Comprehension	1.9652	2.1112
Total	1.9727	2.1311
I.Q.	110.10	111.59

TABLE 14. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER VOCABULARY TEST FOR GIRLS

	SS	df	MS	F	p
Between groups	48.9920	1	48.9920	1.2206	n.s.
Within groups	75736.5634	1887	40.1360		
TOTAL	75785.5553	1888			

TABLE 15. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER COMPREHENSION TEST FOR GIRLS

	SS	df	MS	F	p
Between groups	111.7197	1	111.7197	2.0157	n.s.
Within groups	104587.2417	1887	55.4251		
TOTAL	104698.9614	1888			

TABLE 16. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER TOTAL READING FOR GIRLS

	SS	df	MS	F	P
Between groups	48.8743	1	48.8743	1.2624	n.s.
Within groups	73056.1231	1887	38.7155		
TOTAL	73104.9973	1888			

TABLE 17. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER VOCABULARY TEST FOR GIRLS

	SS	df	MS	F	P
Between groups	1123.2943	1	1123.2943	26.8868	< .001
Within groups	78836.2081	1887	41.7786		
TOTAL	79959.5024	1888			

TABLE 18. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER COMPREHENSION TEST FOR GIRLS

	SS	df	MS	F	P
Between groups	1006.0631	1	1006.0631	15.4293	<.001
Within groups	123041.4213	1887	65.2048		
TOTAL	124047.4844	1888			

TOTAL 19. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER TOTAL READING FOR GIRLS

	SS	df	MS	F	P
Between groups	1182.7762	1	1182.7762	26.4929	<.001
Within groups	84245.1814	1887	44.6450		
TOTAL	85427.9576	1888			

TABLE 20. ANALYSIS OF VARIANCE FOR MEANS OF INTELLIGENCE TESTS FOR GIRLS

	SS	df	MS	F	p
Between groups	1042.1137	1	1042.1137	4.2923	< .05
Within groups	458135.5464	1887	242.7851		
TOTAL	459177.6601	1888			

TABLE 21. ANALYSIS OF COVARIANCE FOR BOYS OF POST-SUMMER VOCABULARY TEST ADJUSTED FOR PRE-SUMMER VOCABULARY TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	7753.8018				
Error (within)	1996	69827.6376	43216.9681	26610.6695	1994	13.3454
Treatment plus error (total)	1997	77581.4394	48861.7650	28719.6745	1995	
Difference for testing adjusted treatment means				2109.0049	1	2109.0049

F = 158.033; df 1, 1994; p < .001

TABLE 22. ANALYSIS OF COVARIANCE FOR BOYS OF POST-SUMMER COMPREHENSION TEST ADJUSTED FOR PRE-SUMMER COMPREHENSION TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	6293.3513				
Error (within)	1996	70455.8839	40464.6515	29991.2323	1994	15.0407
Treatment plus error (total)	1997	76749.2352	45173.6083	31575.6270	1995	
Difference for testing adjusted treatment means				1584.3946	1	1584.3946

F = 105.340; df 1, 1994; $p < .001$

TABLE 23. ANALYSIS OF COVARIANCE FOR BOYS OF POST-SUMMER TOTAL READING TEST ADJUSTED FOR PRE-SUMMER TOTAL READING TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	7561.9464				
Error (within)	1996	104335.2032	34122.5782	70212.6250	1994	35.2119
Treatment plus error (total)	1997	111897.1496	39302.4562	72594.6934	1995	
Difference for testing adjusted treatment means				2382.0684	1	2382.0684

F = 67.649; df 1, 1994; $p < .001$

TABLE 24. ANALYSIS OF COVARIANCE FOR GIRLS OF POST-SUMMER VOCABULARY TEST ADJUSTED FOR PRE-SUMMER VOCABULARY TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	1123.2943				
Error (within)	1887	78836.2081	17796.0350	61040.1731	1886	32.3649
Treatment plus error (total)	1888	79959.5024	18183.7082	61775.7942	1887	
Difference for testing adjusted treatment means				735.6211	1	735.6211

F = 22.729; df 1, 1886; p < .001

TABLE 25. ANALYSIS OF COVARIANCE FOR GIRLS OF POST-SUMMER COMPREHENSION TEST ADJUSTED FOR PRE-SUMMER COMPREHENSION TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	1006.0631				
Error (within)	1887	123041.4213	22132.9677	100908.4536	1886	53.5040
Treatment plus error (total)	1888	124047.4844	22534.1126	101513.3718	1887	
Difference for testing adjusted treatment means				604.9182	1	604.9182

F = 11.306; df 1, 1886; $p < .001$

TABLE 26. ANALYSIS OF COVARIANCE FOR GIRLS OF POST-SUMMER TOTAL READING TEST ADJUSTED FOR PRE-SUMMER TOTAL READING TEST AND I.Q.

Source	df	YY	SS (due)	SS (about)	df	Mean-square
Treatment (between)	1	1182.7762				
Error (within)	1887	84245.1814	19758.0861	64487.0956	1886	34.1925
Treatment plus error (total)	1888	85427.9577	20176.0028	65251.9549	1887	
Difference for testing adjusted treatment means				764.8595	1	764.8595

F = 22.369; df 1, 1886; p < .001

TABLE 28. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER VOCABULARY TEST
FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED

	SS	df	MS	F	P
Between Groups	3658.9370	2	1829.4685	47.0327	<.001
Within Groups	74022.4634	1903	38.8978		
TOTAL	77681.4003	1905			

TABLE 29. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER COMPREHENSION
TEST FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM
WATCHED

	SS	df	MS	F	P
Between Groups	3387.9022	2	1693.9511	33.7230	<.001
Within Groups	95590.3202	1903	50.2314		
TOTAL	98978.2224	1905			

TABLE 30. ANALYSIS OF VARIANCE FOR MEANS OF PRE-SUMMER TOTAL READING
FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED

	SS	df	MS	F	P
Between groups	3677.9872	2	1838.9936	50.1129	<.001
Within groups	69834.4268	1903	36.6970		
TOTAL	73512.4139	1905			

TABLE 31. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER VOCABULARY
TEST FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM
WATCHED

	SS	df	MS	F	P
Between groups	7865.0171	2	3932.5086	102.1042	<.001
Within groups	73293.4089	1903	38.5147		
TOTAL	81158.4260	1905			

TABLE 32. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER COMPREHENSION TEST FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED.

	SS	df	MS	F	P
Between groups	11655.7236	2	5827.8618	93.0457	< .001
Within groups	119193.2900	1903	62.6344		
TOTAL	130849.0136	1905			

TABLE 33. ANALYSIS OF VARIANCE FOR MEANS OF POST-SUMMER TOTAL READING FOR EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED

	SS	df	MS	F	P
Between groups	8800.1254	2	4400.0627	106.3714	< .001
Within groups	78717.8059	1903	41.3651		
TOTAL	87517.9313	1905			

TABLE 34. ANALYSIS OF VARIANCE FOR MEANS OF INTELLIGENCE TESTS FOR
EXPERIMENTAL GROUPS ACCORDING TO NUMBER OF DAYS PROGRAM WATCHED

	SS	df	MS	F	P
Between groups	15939.7721	2	7969.8861	34.5893	< .001
Within groups	438479.8186	1903	230.4150		
TOTAL	454419.5907	1905			

TABLE 35. MULTI T VALUES FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR EXPERIMENTAL GROUPS 1 AND 2

	F*	df	t**	p
Pre-summer				
Vocabulary	1.257	611	9.504	<.001
Comprehension	1.513	573	7.176	<.001
Total	1.420	611	9.817	<.001
Post-summer				
Vocabulary	1.283	611	14.369	<.001
Comprehension	1.779	551	12.239	<.001
Total	1.486	611	14.566	<.001
I. Q.	1.140	611	8.135	<.001

* For homogeneity of variance

** Homogeneous

TABLE 36. MULTI T VALUES FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR EXPERIMENTAL GROUPS 1 AND 3

	F*	df	t**	p
Pre-summer				
Vocabulary	1.026	85	0.930	n.s.
Comprehension	1.072	73	0.914	n.s.
Total	1.035	86	1.257	n.s.
Post-summer				
Vocabulary	1.019	86	5.901	<.001
Comprehension	1.492	70	5.326	<.001
Total	1.165	86	6.075	<.001
I.Q.	1.176	86	2.295	<.01

* For homogeneity of variance

** Homogeneous

TABLE 37. MULTI T VALUES FOR PRE-SUMMER AND POST-SUMMER READING TESTS AND INTELLIGENCE TESTS FOR EXPERIMENTAL GROUPS 2 AND 3

	F*	df	t**	p
Pre-summer				
Vocabulary	1.289	108	6.092	< .001
Comprehension	1.411	74	4.530	< .001
Total	1.372	109	6.100	< .001
Post-summer				
Vocabulary	1.259	109	4.380	< .001
Comprehension	1.192	53	3.740	< .001
Total	1.275	109	4.415	< .001
I.Q.	1.341	109	3.783	< .001

* For homogeneity of variance

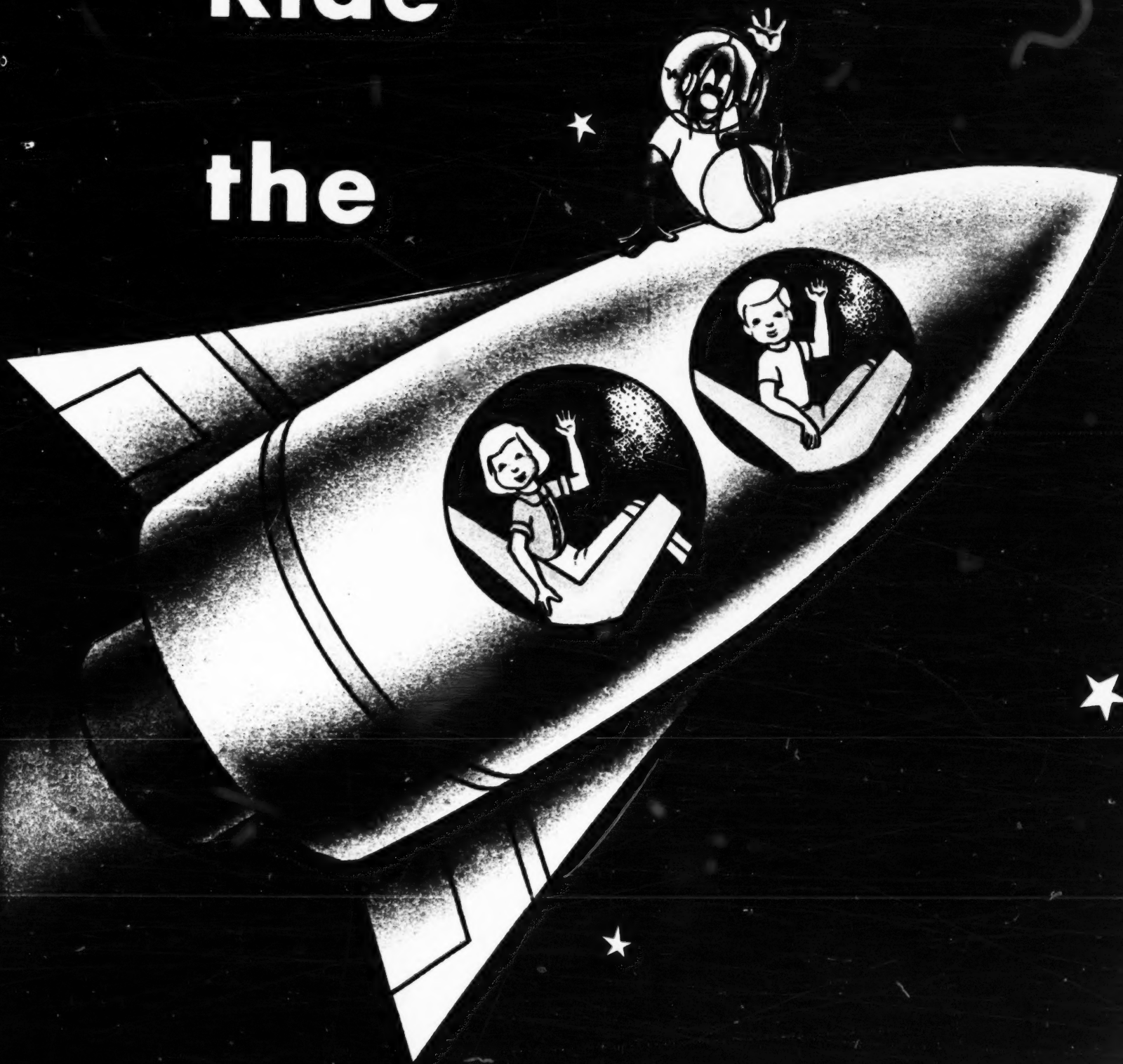
** Homogeneous

Appendix C

Activity Book *

*** See Chapter III for further information**

★ **Ride**
the



★ **Reading Rocket**

Aa Bb Cc Dd

Ee Ff Gg Hh

Ii Jj Kk Ll Mm

Nn Oo Pp Qq

Rr Ss Tt Uu Vv

Ww Xx Yy Zz

Ride the Reading Rocket

**Produced under contract
with the
United States Office of Education
Department of Health, Education, and Welfare
under the provisions of the
Cooperative Research Program**

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**Evansville-Vanderburgh School Corporation
Evansville, Indiana**

To Parents of Reading Rocket Riders,

This summer your first grade Reading Rocket Rider will need your help as the ground controller. The blast-off will be for an eight-week orbit. Each weekday morning the readers will board the reading rocket via a local television station.

Teachers have found that children often lose during the summer months many of the reading skills they have acquired in first grade. This program has been developed in an effort to maintain these skills.

This book is to be used each day under the direction of the television teacher. In order that your child may gain most fully from this program it is necessary that the book be used only under her daily guidance. Will you equip the launching pad with crayons and pencil? For best results your child should be able to work without interference from other children.

There are four postcards in the back of the book. Each of the cards should be filled in with your assistance and returned when requested.

The second grade teacher may wish to see the book in the fall. The attendance record in the back of the book should be signed by you before it is taken to school.

Reading library books will advance the progress of your Rocket Rider. You are urged to help him secure appropriate books during the summer.

Now you and your Reading Rocket Rider are ready to blast off on an adventure which will be a booster for a successful entry into second grade.

Prepared by

**Marie Strunk, Supervisor
of Primary Education**

**Sandra Altheide, Television
Teacher**

Mary Bullard

Beverly Fulkerson

Janice Kinney

Florice Lester

Grace Sevringhaus

Helen Spiegel

Donna Tyner

Illustrated by Harry Friley

Directed by Dr. Jack W. Humphrey, Director of Reading Services



All About Me

.....
My name is _____

I am a _____

.....
I have _____ pets.

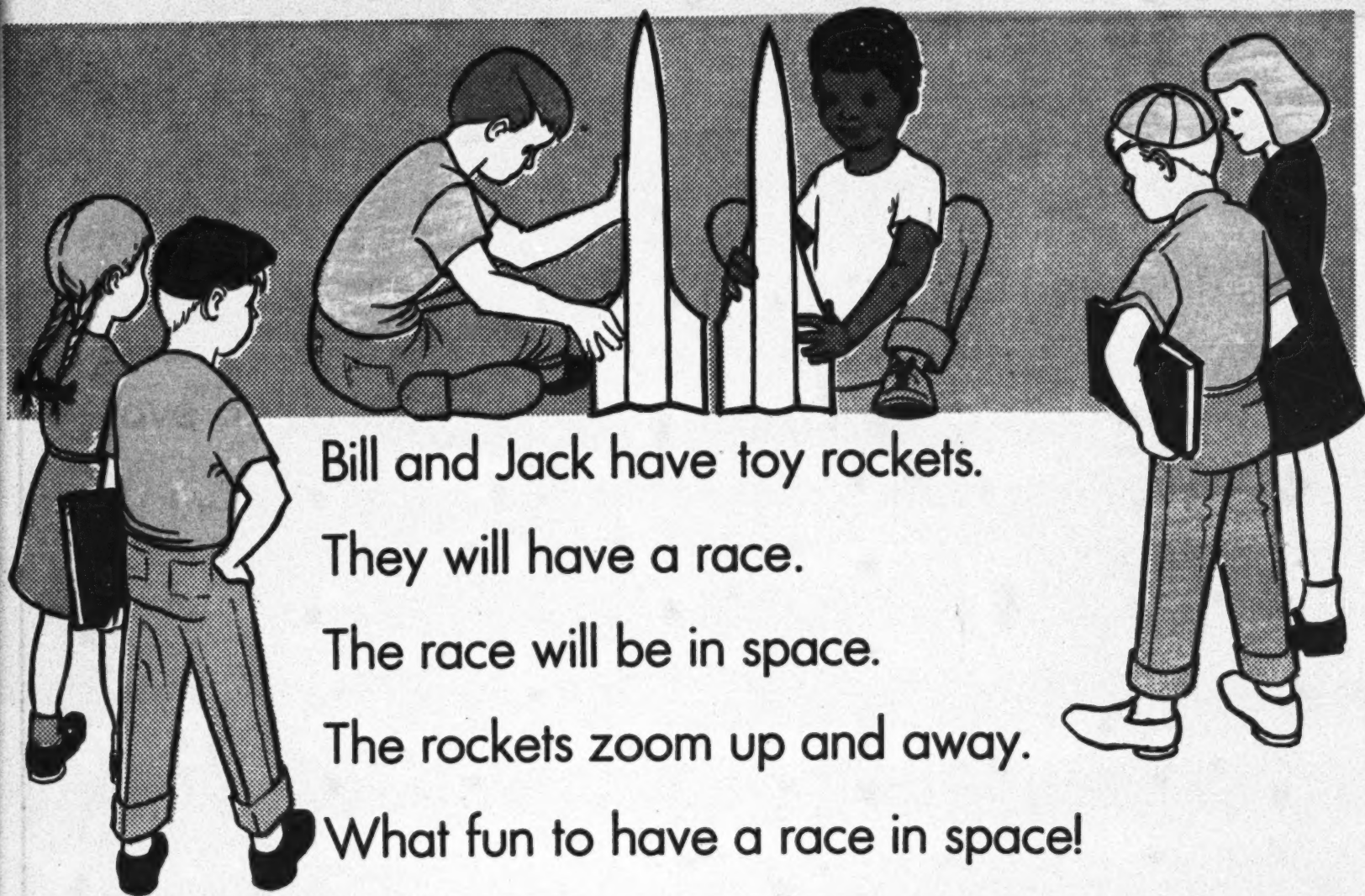
.....
My house has _____ rooms.

.....
I like _____ best.

- | | |
|-----------------------|------------------------------|
| 1. to ride a bicycle | 7. to stay home from a party |
| 2. to play ball | 8. to play with children |
| 3. to drop ice cream | 9. to run races |
| 4. to play cowboy | 10. to go on a picnic |
| 5. to get lost | 11. to find nothing |
| 6. to play with dolls | 12. to catch a fish |

Word of the Day

.....



Bill and Jack have toy rockets.

They will have a race.

The race will be in space.

The rockets zoom up and away.

What fun to have a race in space!

1. How many boys have rockets?

one

three

two

2. What will the rockets do?

space

zoom

fun

3. Where will the rockets go?

in water

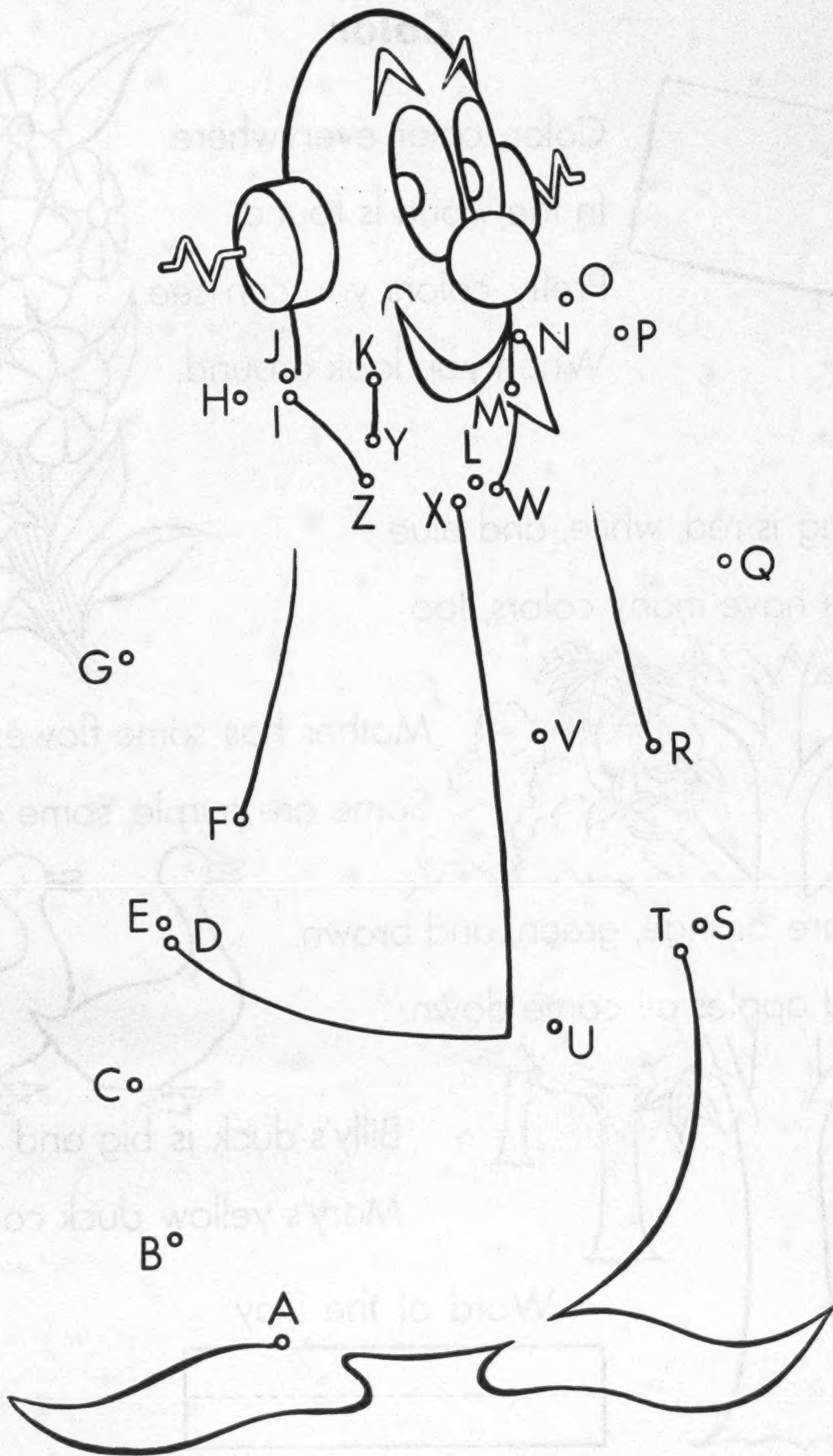
on a box

in space

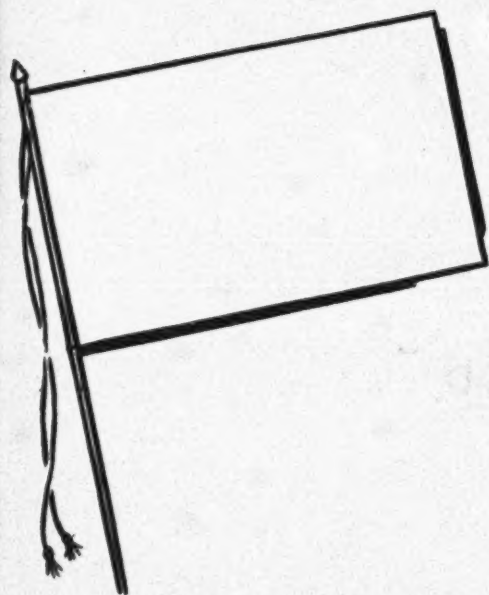


Word of the Day

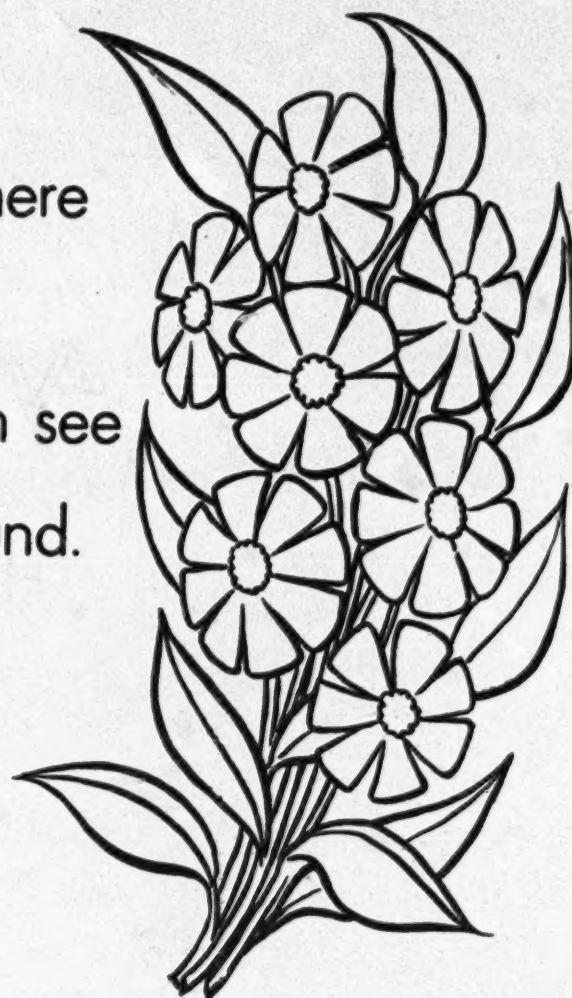
4 (four)



Color



Color, color everywhere
In the world is found.
Pretty colors you can see
When you look around.



Our flag is red, white, and blue.

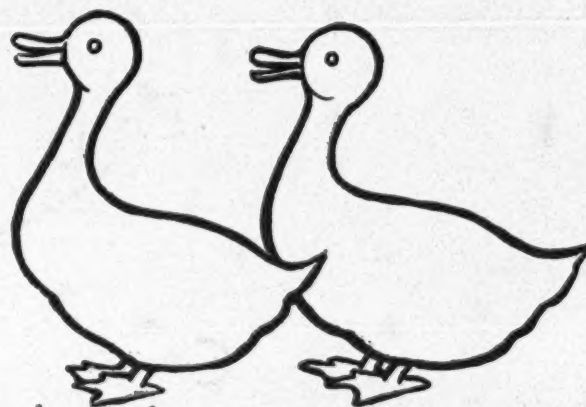
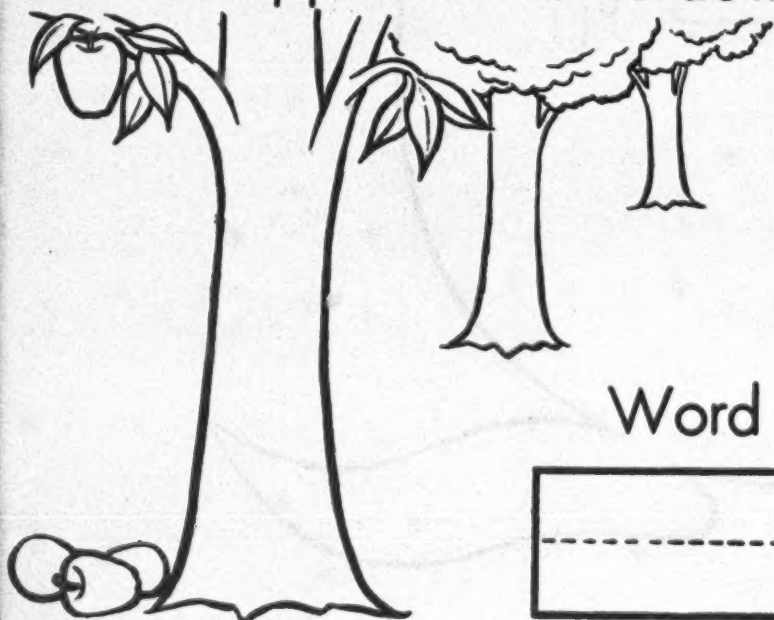
Flowers have many colors, too



Mother has some flowers for you
Some are purple, some are blue.

Trees are orange, green, and brown.

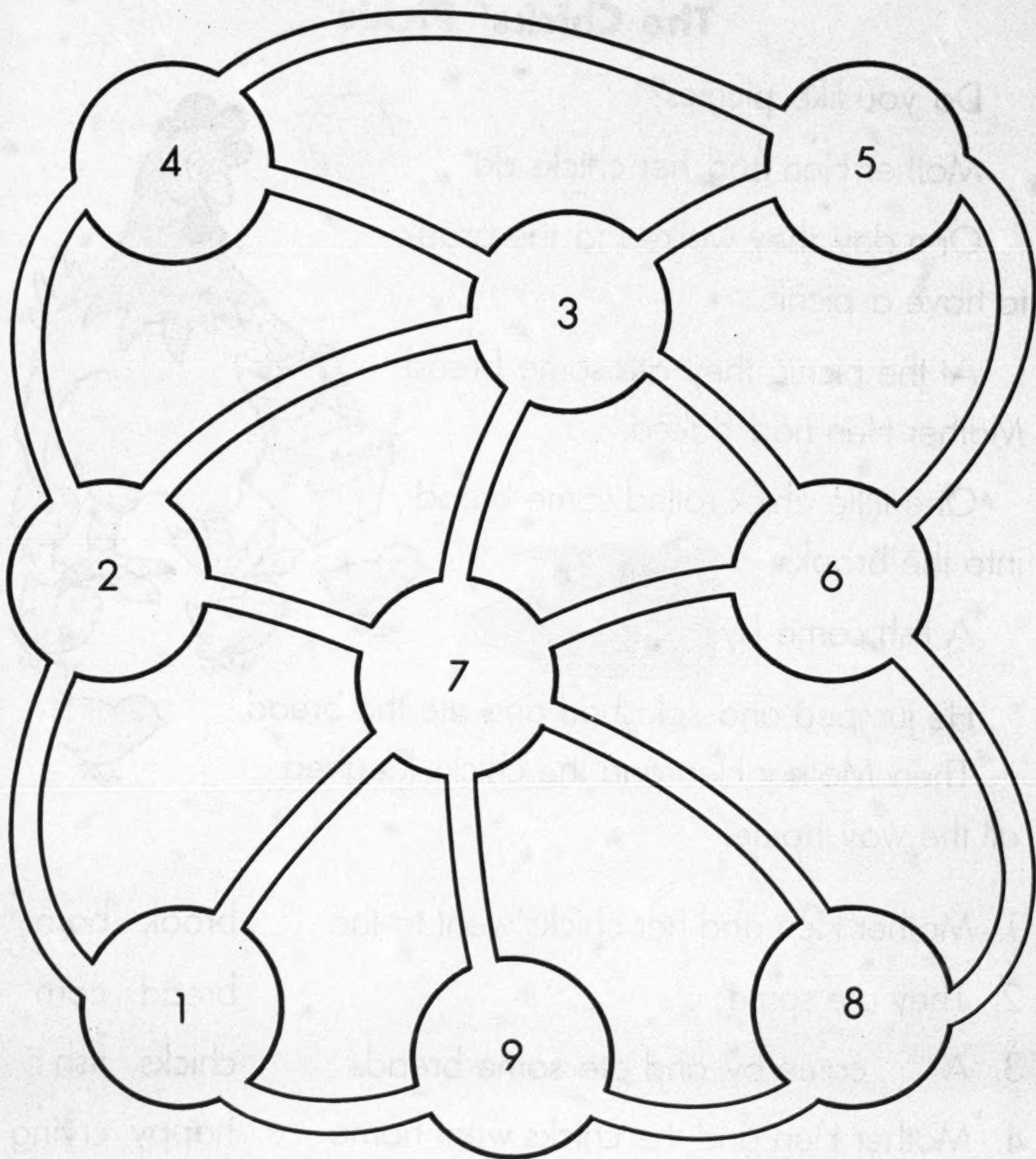
See red apples all come down.



Billy's duck is big and black.

Mary's yellow duck can quack.

Word of the Day



1. red
4. orange
7. white

2. blue
5. purple
8. black

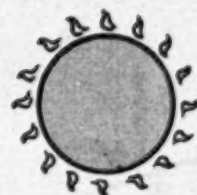
3. green
6. yellow
9. brown

(seven) · 7

The Chicks' Picnic

Do you like picnics?

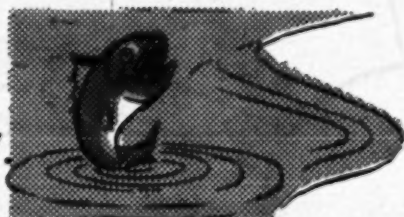
Mother Hen and her chicks do.



One day they walked to the brook to have a picnic.

At the picnic they ate some bread Mother Hen had baked.

One little chick rolled some bread into the brook.



A fish came by.



He jumped and splashed and ate the bread. Then Mother Hen and the chicks laughed all the way home.

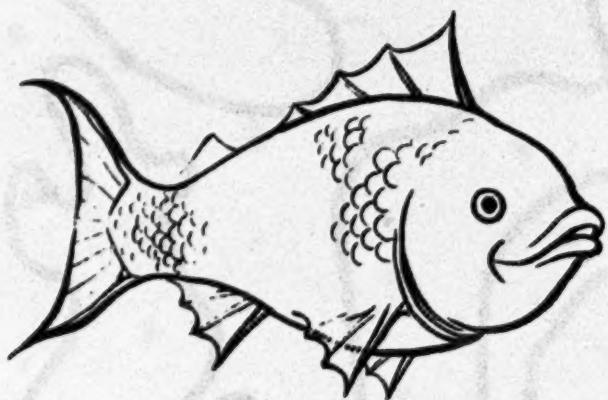
1. Mother Hen and her chicks went to the ...
2. They ate some ...
3. A ... came by and ate some bread.
4. Mother Hen and the chicks went home ...

brook barn
bread corn
chicks fish
happy crying

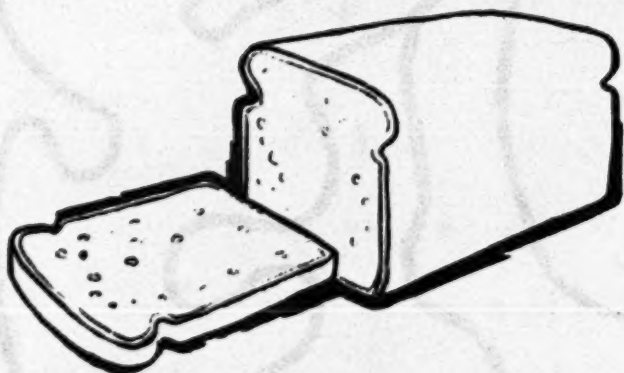
Word of the Day



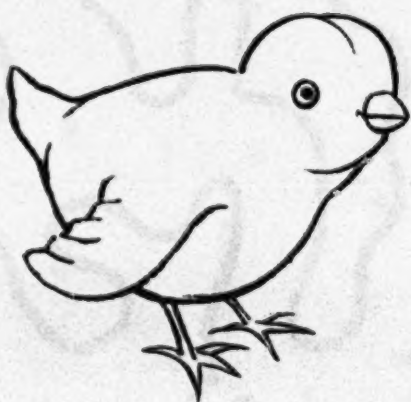
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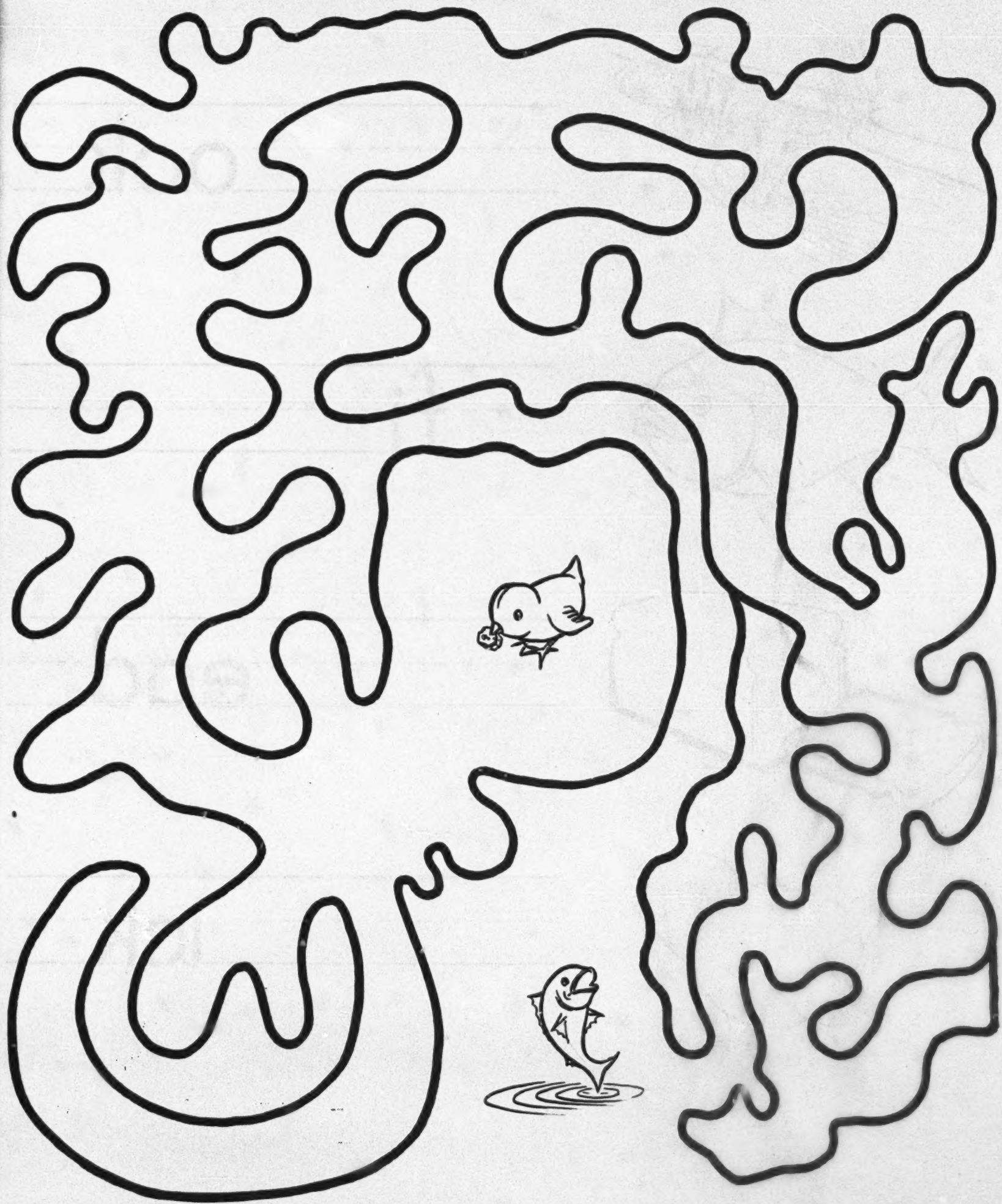
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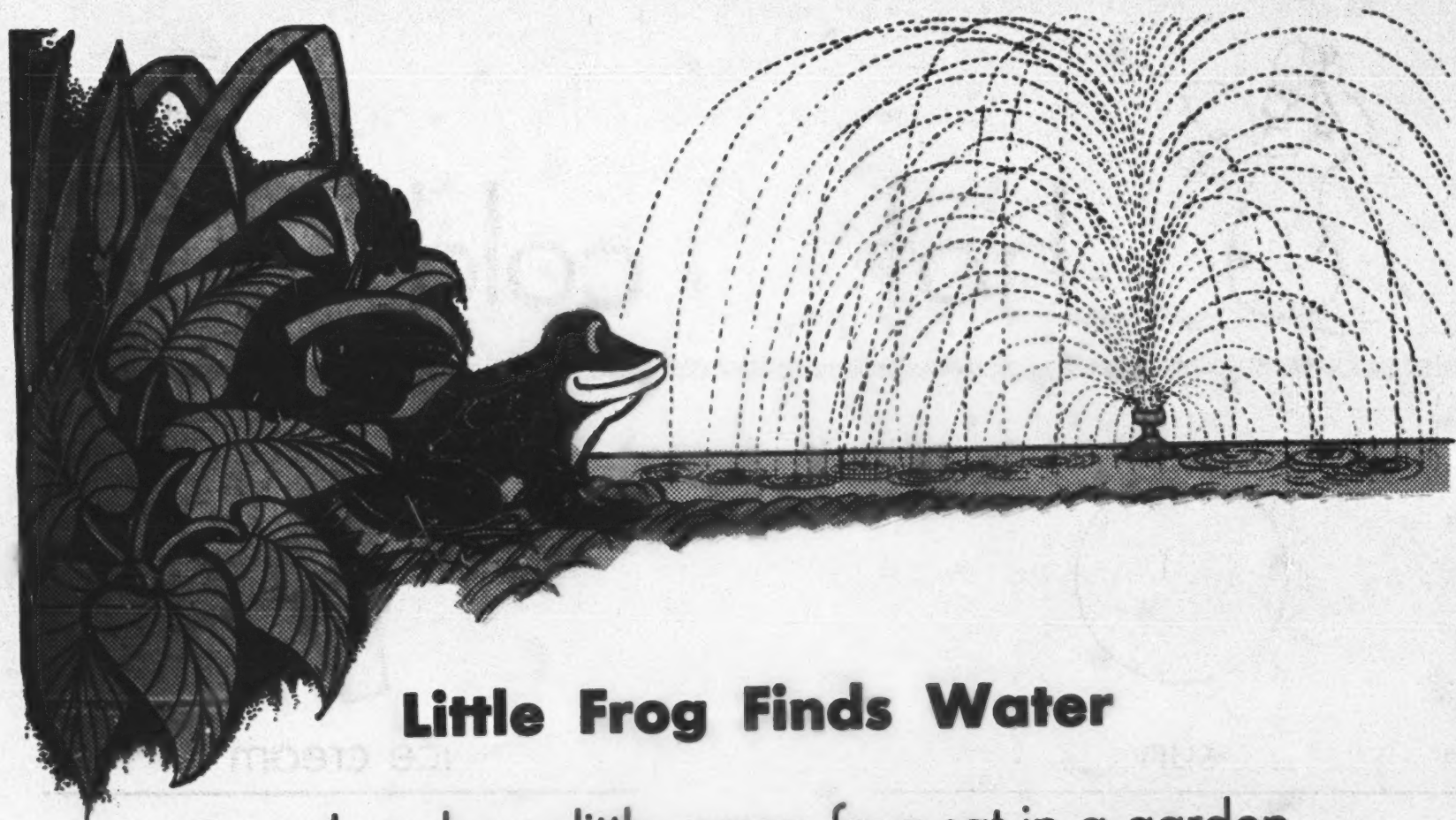
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(nine) 9



Can the chick get to the brook?



Little Frog Finds Water

On a hot day a little green frog sat in a garden.

He was not a happy frog.

He wanted to splash in water.

Then he saw a sprinkler.

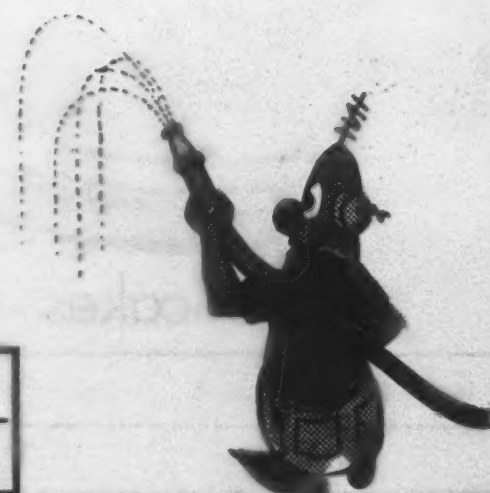
Out came the water and soon there was a puddle.

He had a good time playing in the water.

Then a _____ came by.

Away jumped the frog.

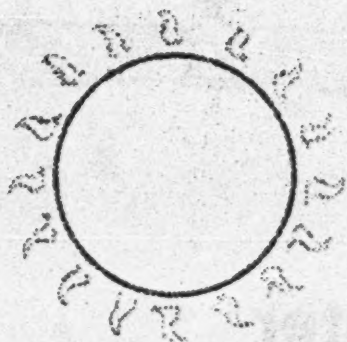
Word of the Day





hot

cold



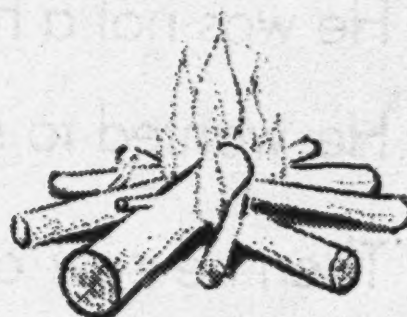
sun



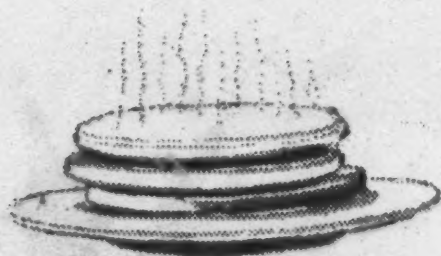
ice cream



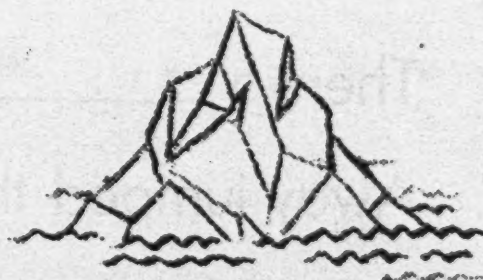
snowman



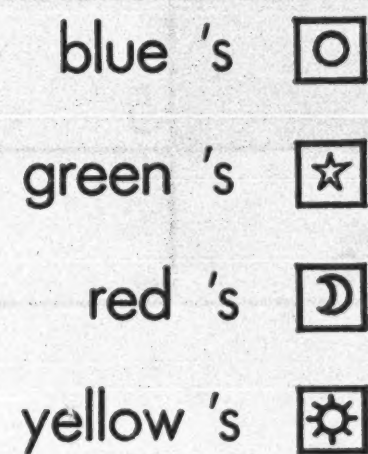
fire

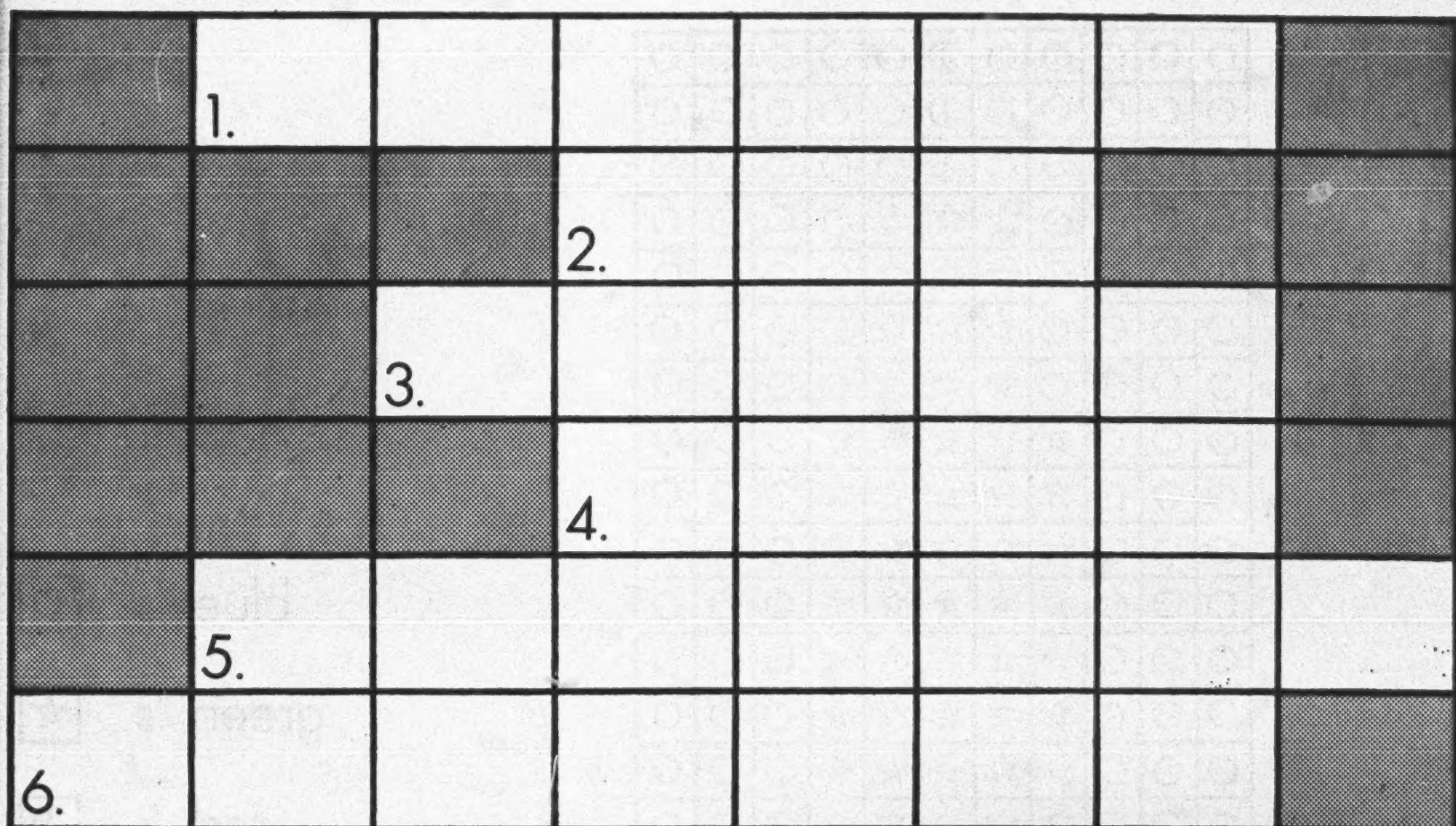


pancakes



iceberg





1. It can zoom in the sky.
2. It takes us downtown.
3. It will go fast on a track.
4. It is found in the water.
5. The farmer rides on it.
6. Children ride on it.



bus tractor boat train bicycle

Guess and Make

The s..... is big and yellow.
Make it.

The r..... can blast off.
Make it.

R..... can ride up, up.
Make him.

I can ride to the m.....
Make it.

Word of the Day

What Happened?

1. The airplanes _____ed_____ up from the ground.
2. Bees _____ed_____ around the little bear.
3. Mike _____ed_____ when he saw the funny duck.
4. The children _____ed_____ in the sand.
5. Father _____ed_____ the chairs.
6. It _____ed_____ all day and all night.

play
paint
zoom

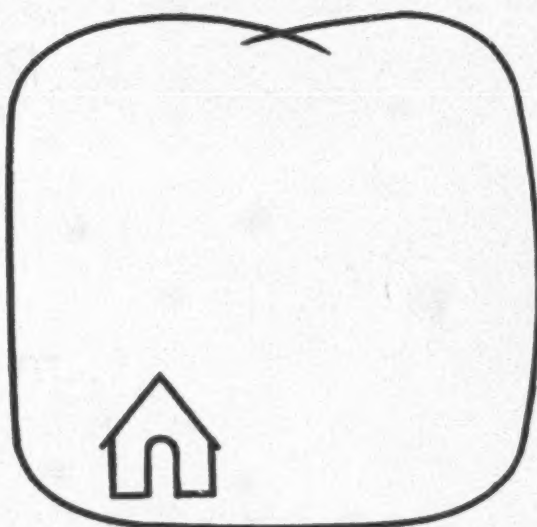
laugh
rain
buzz



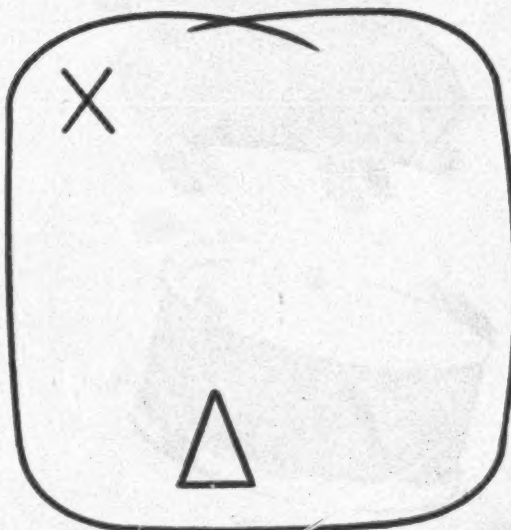
Word of the Day



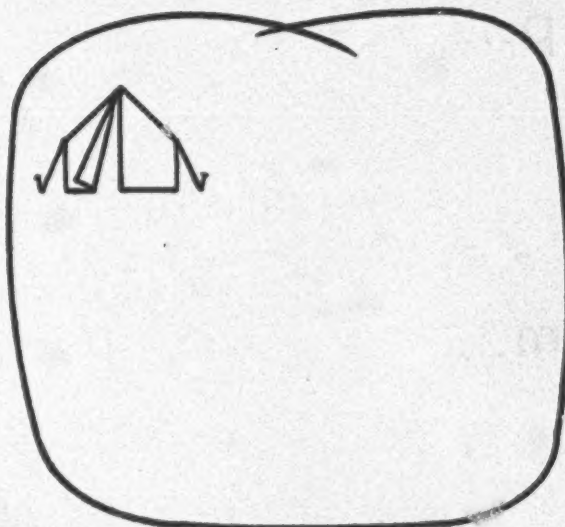
How Many More?



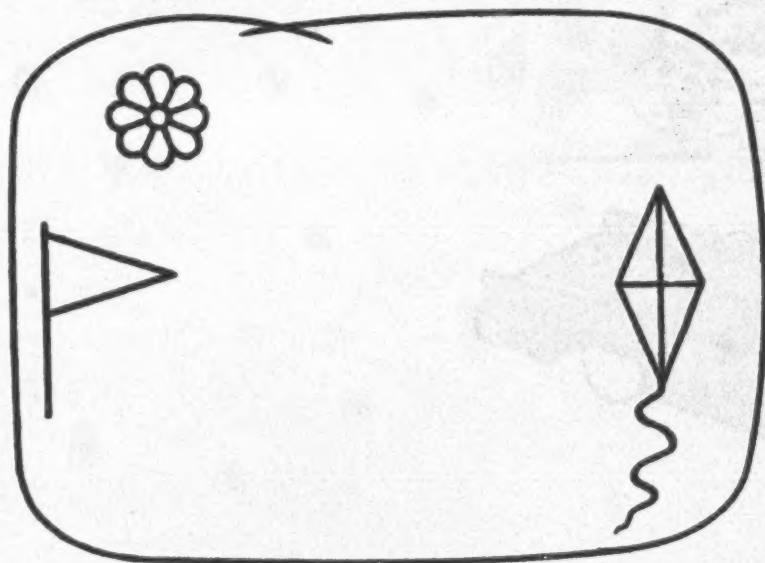
five



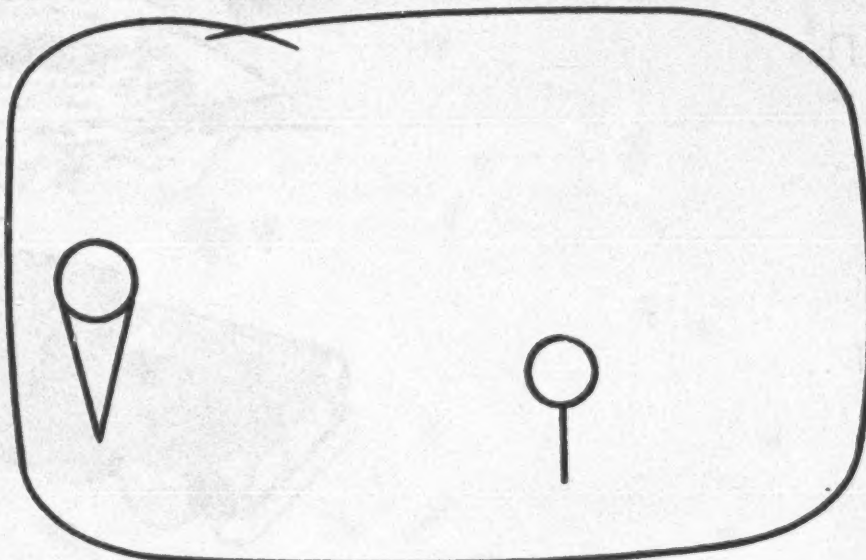
six



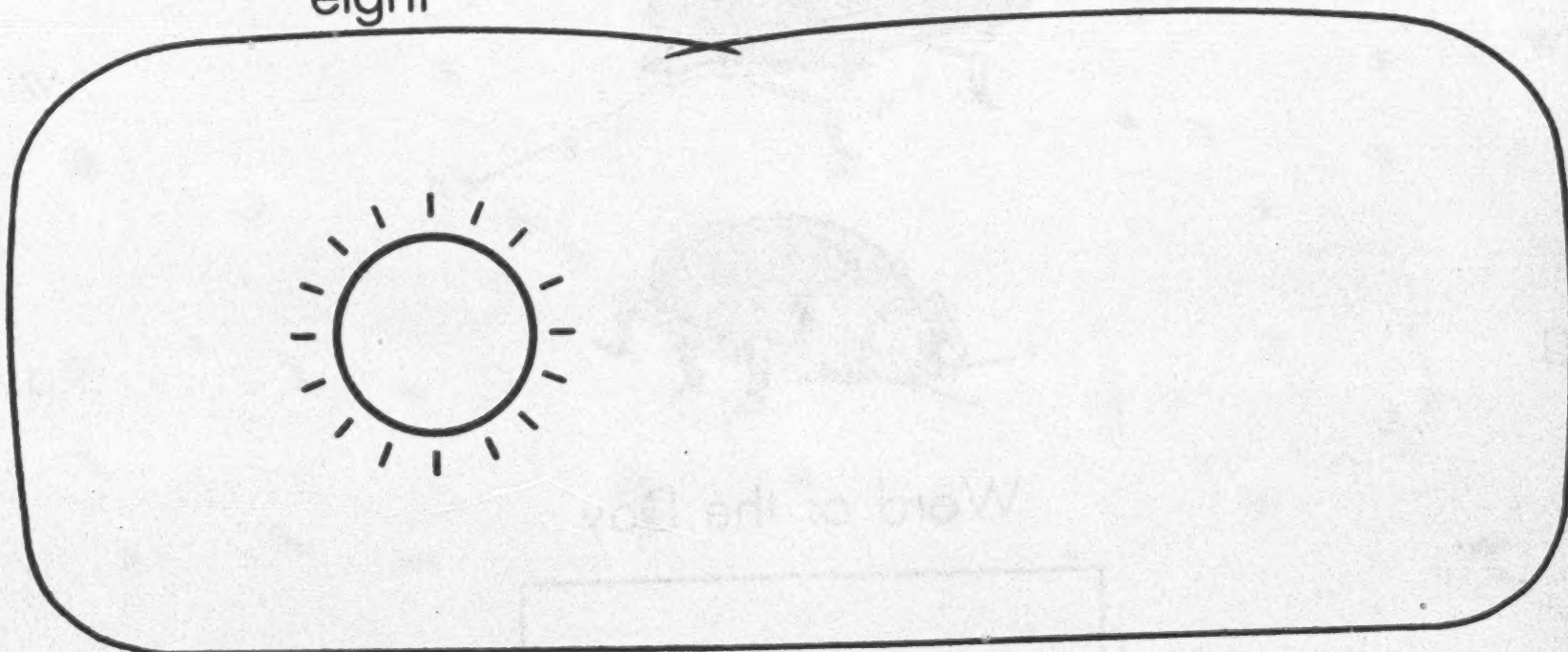
seven



eight



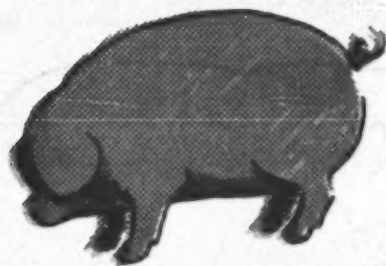
nine



ten

Which Is Right?

p...



...p

m...



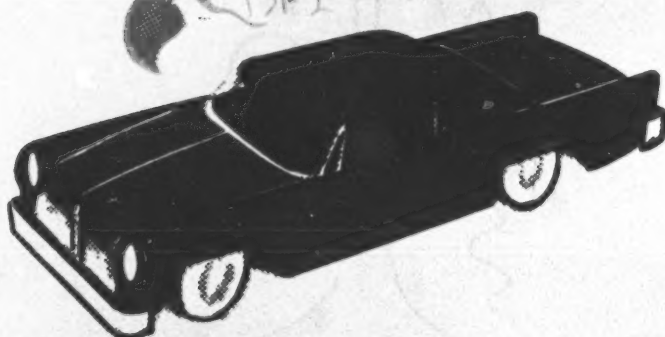
...m

n...



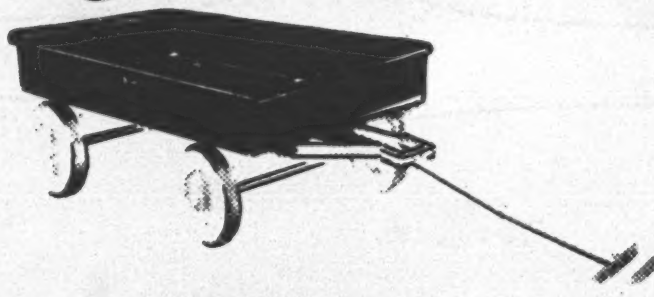
...n

r...



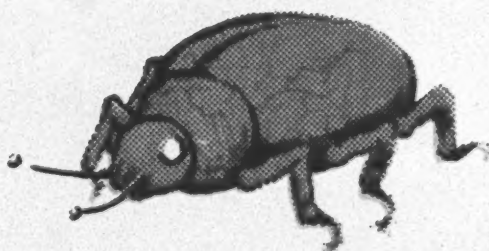
...r

w...



...w

g...



...g

Word of the Day

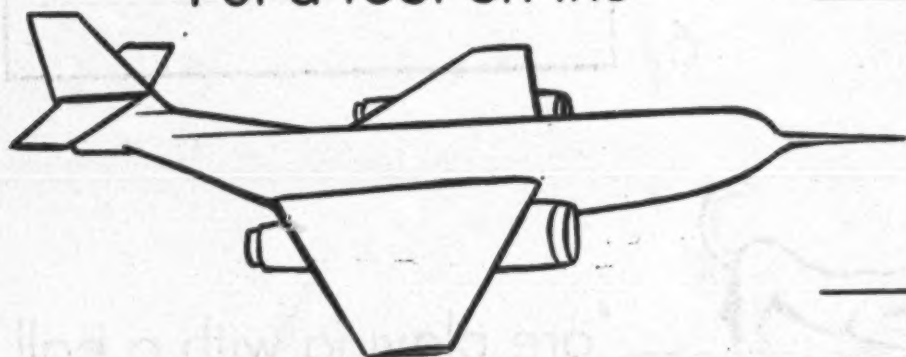
What's Missing?

Make a window on the

et

Put a foot on the

et

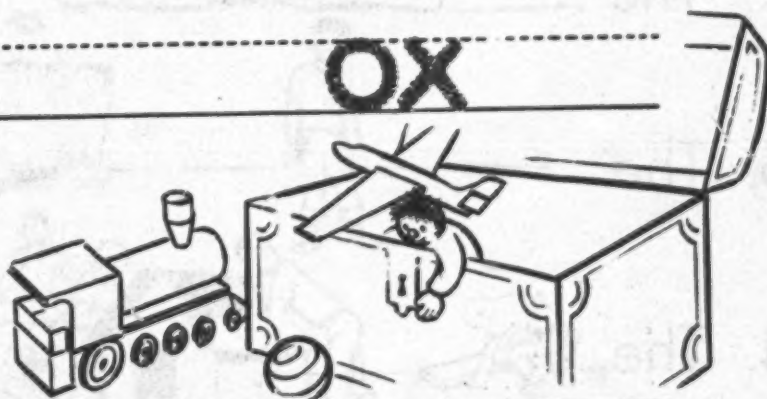


Make a nose on the

ox

Put a toy in the

ox

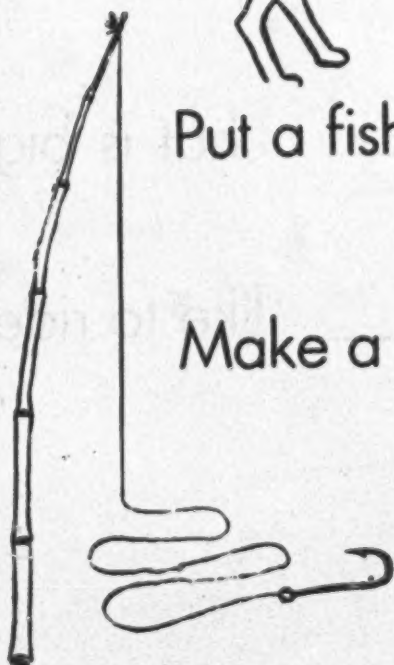


Put a fish on the

ook

Make a turtle in the

ook



1.

4.

2.

5.

3.

6.

1. The  are playing with a ball.

2. The  foot is black.

3. The  bicycle is lost.

4. The  are building a dog house.

5. The  hat is big.

6. The  like to ride.

Word of the Day

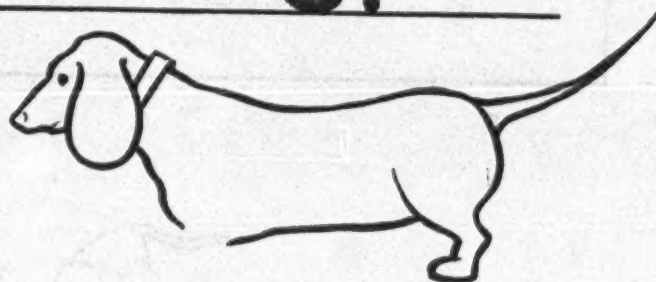
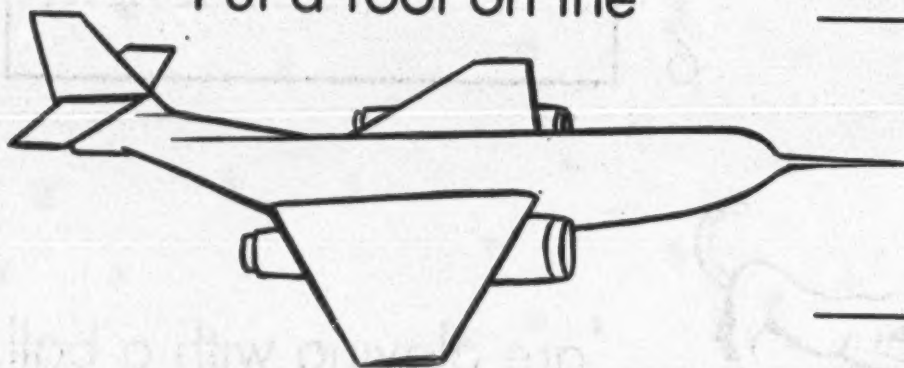
What's Missing?

Make a window on the

et

Put a foot on the

et

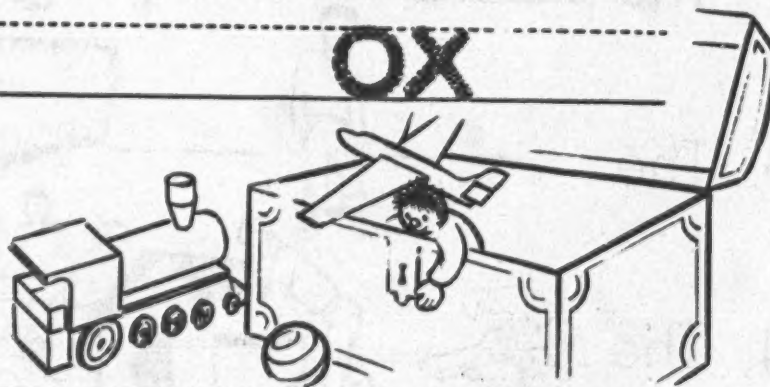


Make a nose on the

ox

Put a toy in the

ox

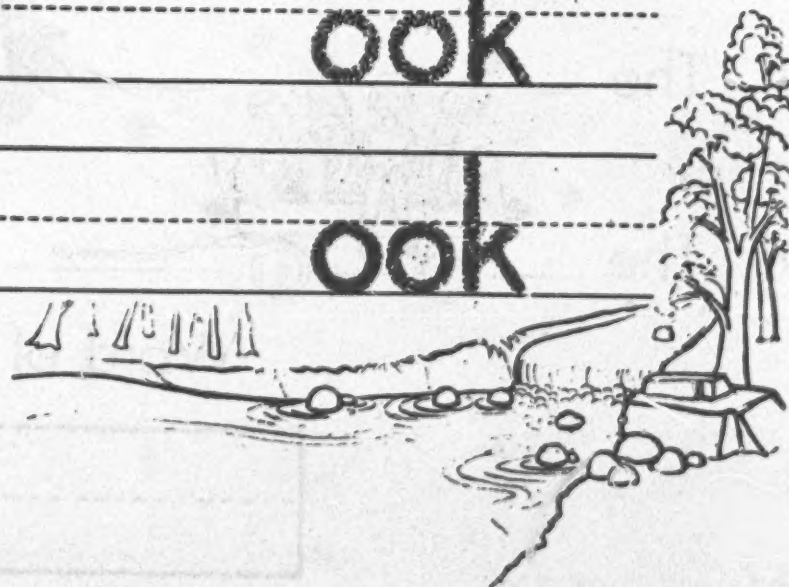
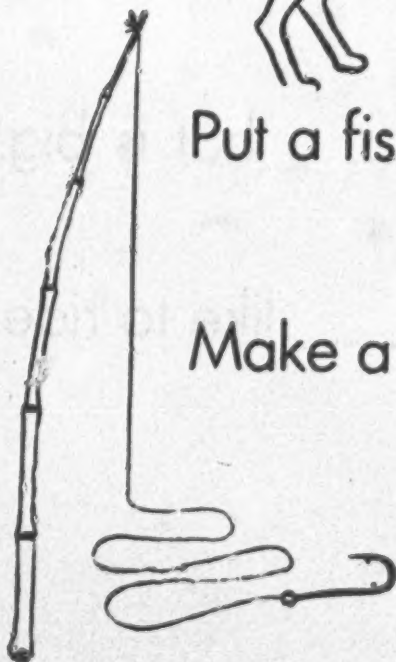


Put a fish on the

ook

Make a turtle in the

ook



Which Is It?

1. See the boys jump over the

ball

wall

hall

2. The run to the school.

toys

joys

boys

3. We can the Reading Rocket.

ride

hide

wide

4. It is fun to to the store.

talk

walk

balk

5. A kitten makes a good

get

pet

met

6. The surprise is in the

fox

pox

box

7. Boys and girls look when they go across the street.

must

just

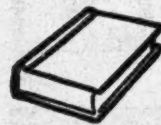
rust



Word of the Day



goat



book



down



cat

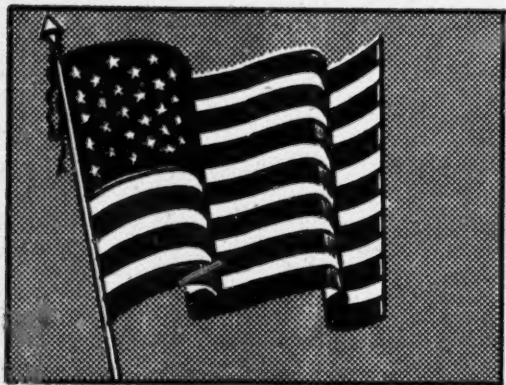
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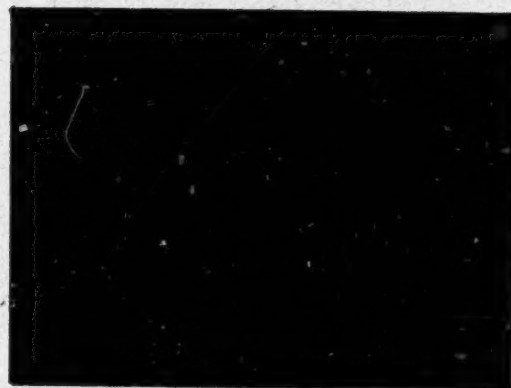
sl



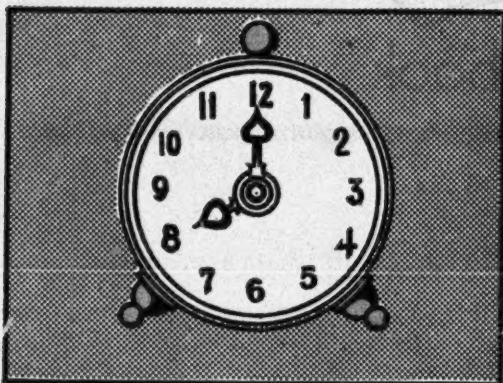
ag



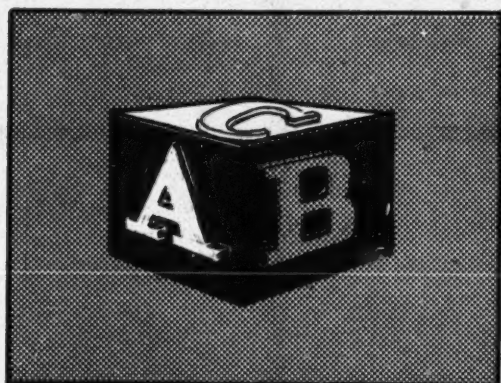
ant



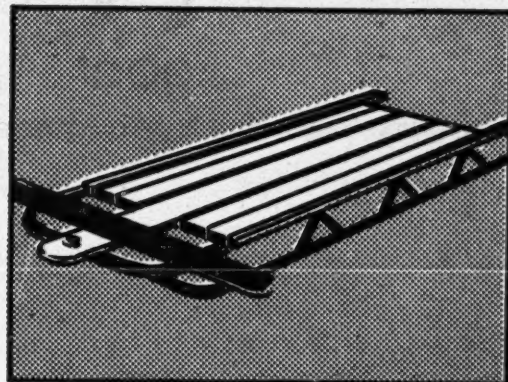
ack



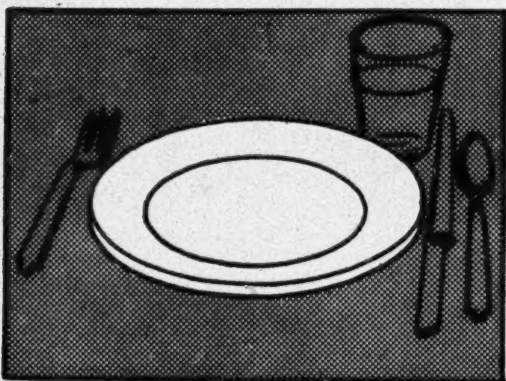
ock



ock



ed



ate

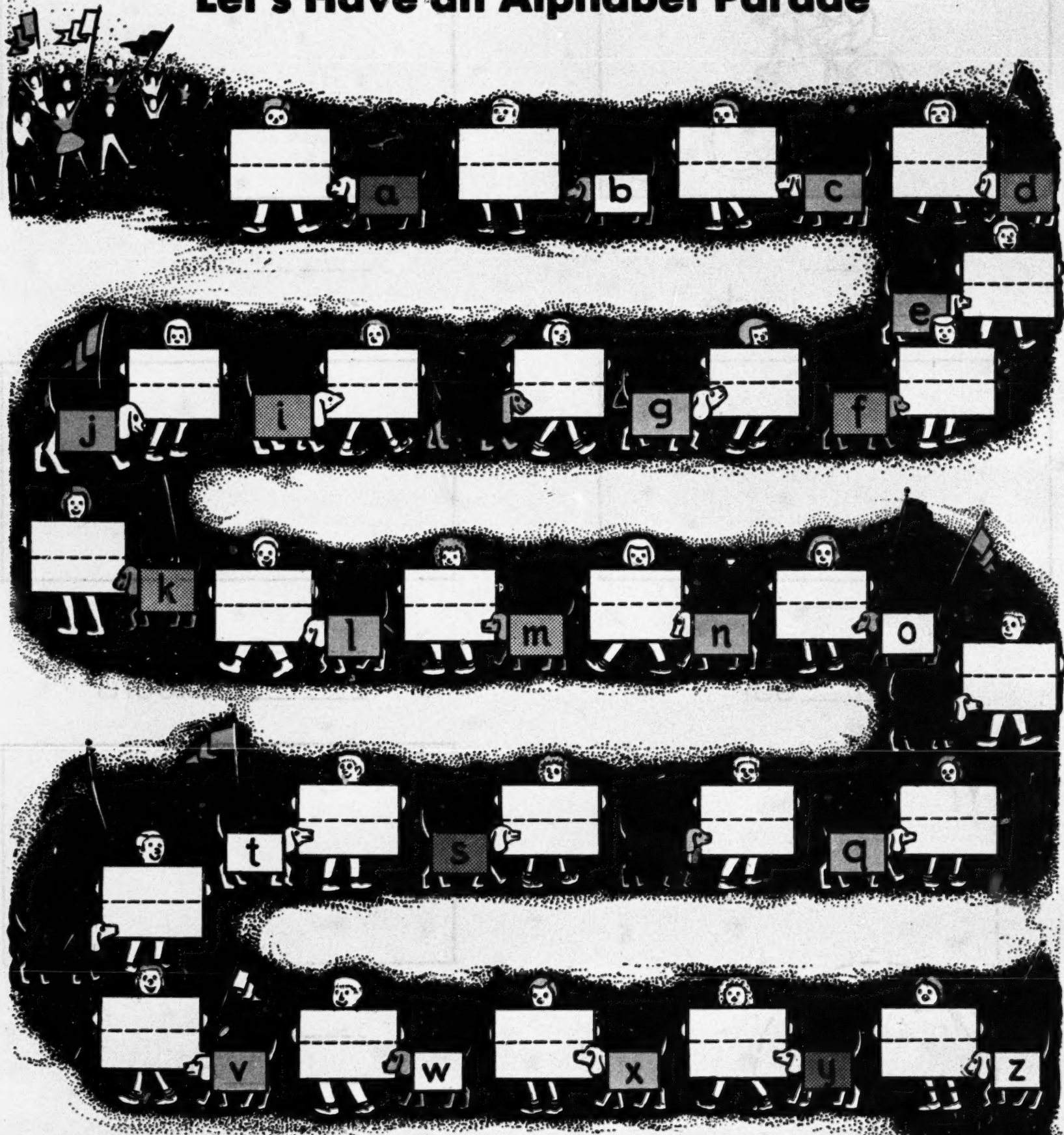


owers



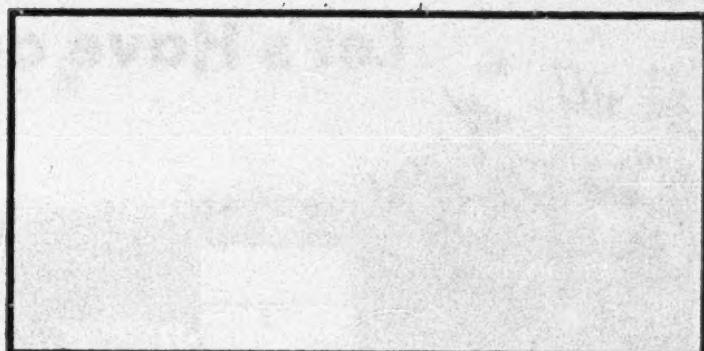
own

Let's Have an Alphabet Parade

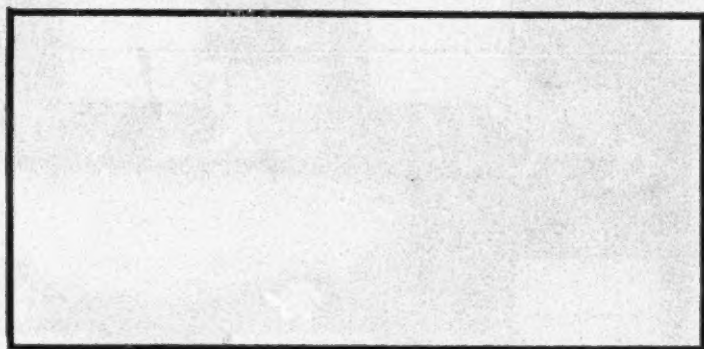


Word of the Day

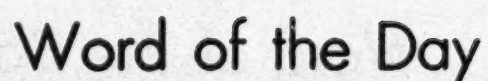
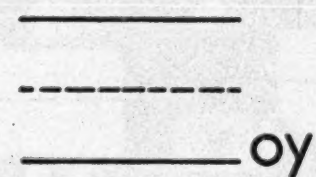
The End!



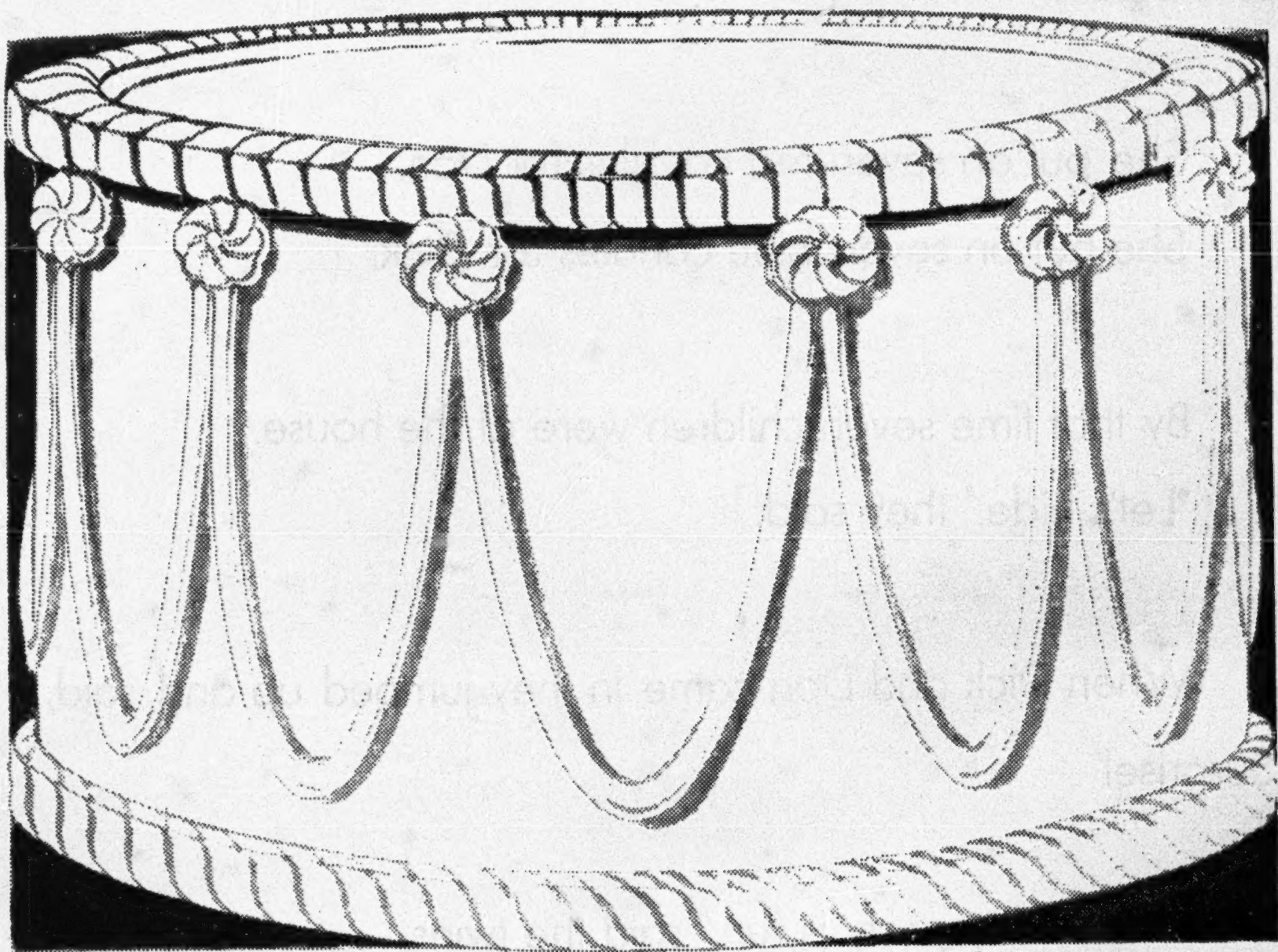
_____asket



_____alloons



The Twins' Birthday Cake



The Twins' Birthday

Dick and Don are twins.

One day Mother said, "Please go to the store.
Get some bread and eggs."

As soon as they had gone Mother took a cake out
of a box.

She put on seven red candles for Don.
She put on seven blue candles for Dick.

By that time seven children were at the house.
"Let's hide," they said.

When Dick and Don came in they jumped up and said,
"Surprise!"

"A birthday party is fun," said the twins.

1. Who are the twins?

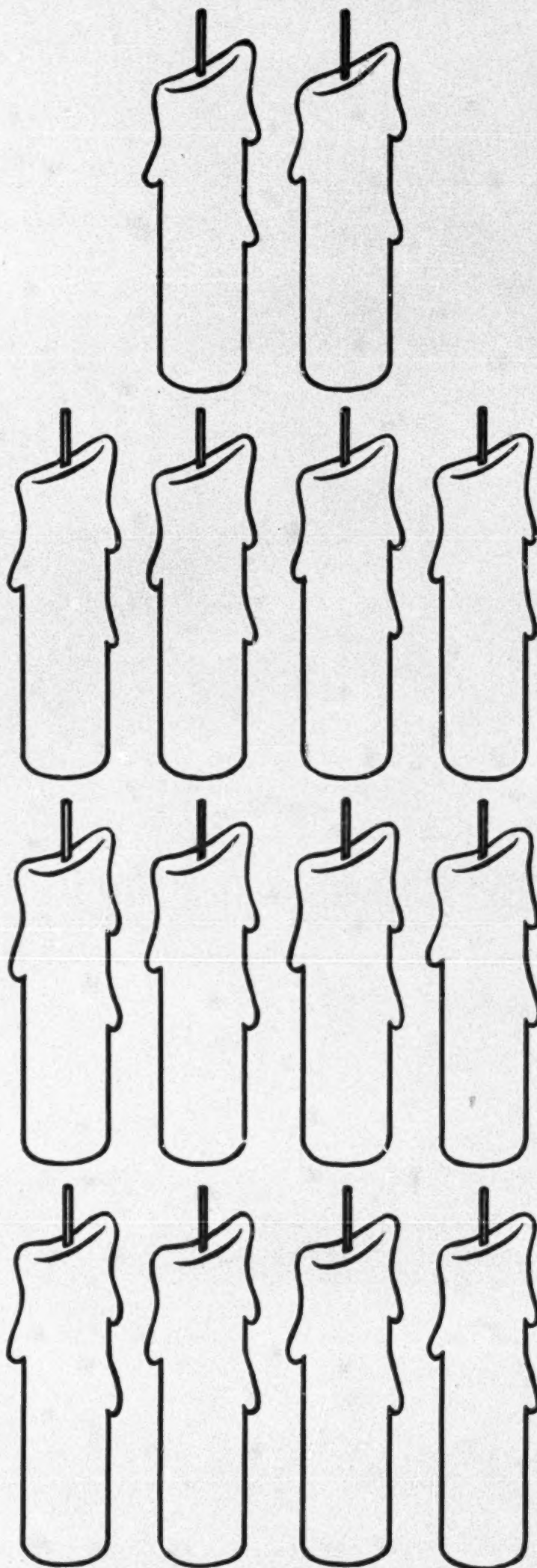
2. How old is Dick?

3. How old is Don?

4. How old are you?

5. What did Mother take
out of a box?

6. What was put on the cake?



1. Who are the twins?

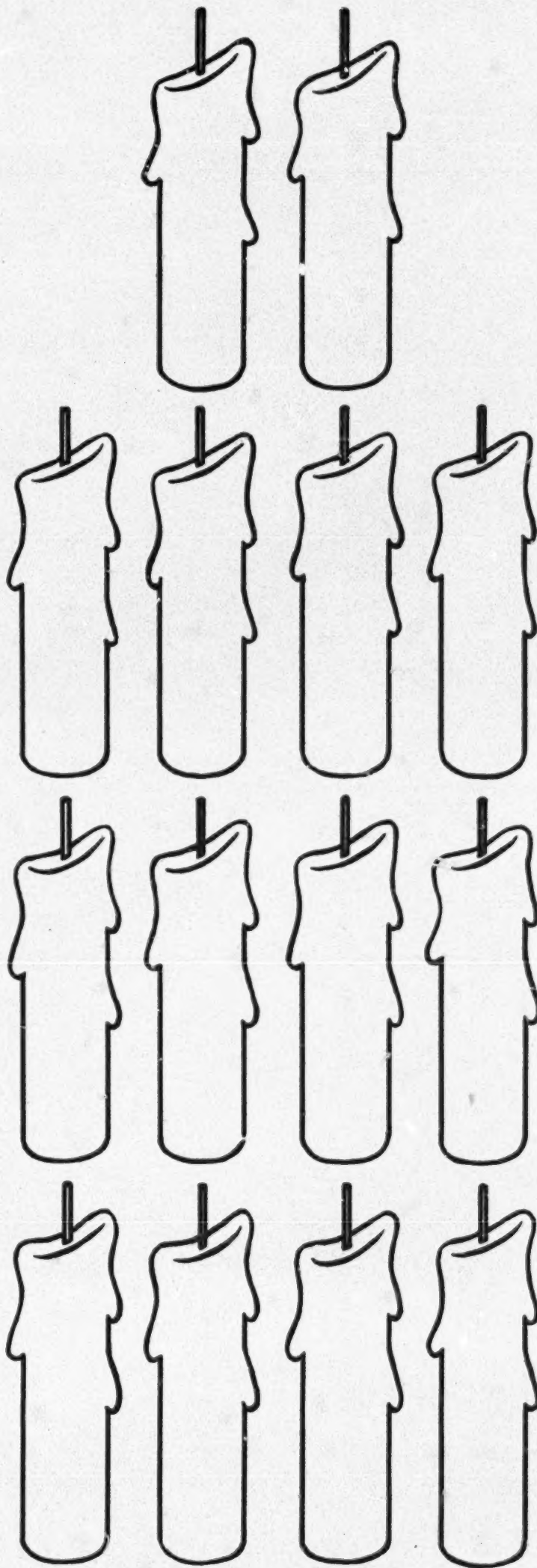
2. How old is Dick?

3. How old is Don?

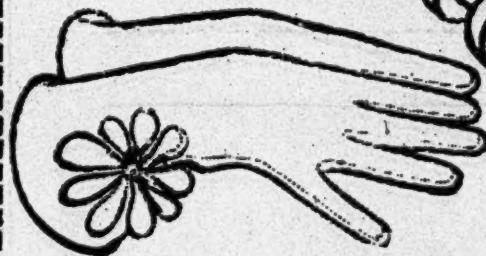
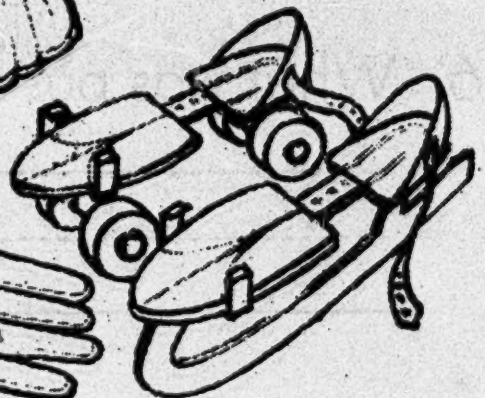
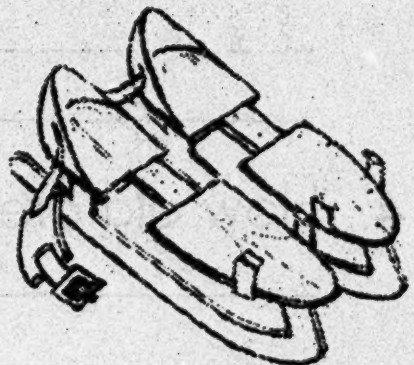
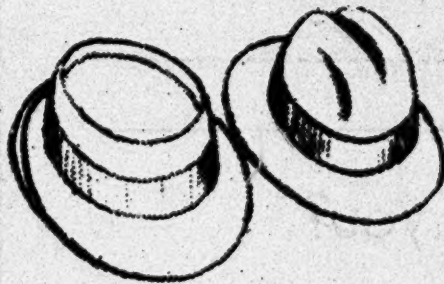
4. How old are you?

5. What did Mother take
out of a box?

6. What was put on the cake?



Things in Pairs



1. What does a turkey have?

some flowers

some feathers

2. What does a rabbit eat?

little cabbages

big buttons

3. What does a dress have?

pockets

picnics

4. What does a horse eat?

house

hay

5. What does a cowboy have?

a dress

a horse

6. What does a bear like to eat?

money

honey

Word of the Day

Sam and Sally Go to the Zoo

"Hurry," said



"Hurry," said



" is ready to go to the zoo."



Sam

"I am coming," said



"I have our dinner in the



Sally

The family got into the

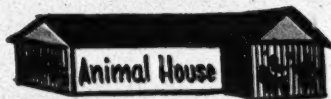


Away they went to the zoo.

"Here we are," said



"Let's go to the



"I want to see the



," said



"I want to see the



," said



The



was eating hay.

The



was swimming in the water.

Next to the



a big



was sleeping.



and



looked at the



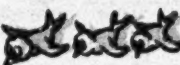
in their



They were doing many tricks.

They were playing catch with a



Then the family went to the  house.
There were many, many  flying around.

"How pretty!" said .

"They are wonderful!"

"I wish I could fly like a .

"I can fly," said , "if I am in a .

 laughed.

"Come fly with me now," she said.

"It is time for dinner."

 took the .

They found a  and sat down.

Then they all started to eat.

"Mother," said , "something is by my .

"Mother," said .

"A  just came out from under the table."

"It took my !"

Just then a zoo keeper came running by.

"Have you seen a ?" he called.

"A baby  got out of the !"

"So that is it," said .

"Yes, I see a baby .

"He is under the .

"He wants to have a picnic, too."

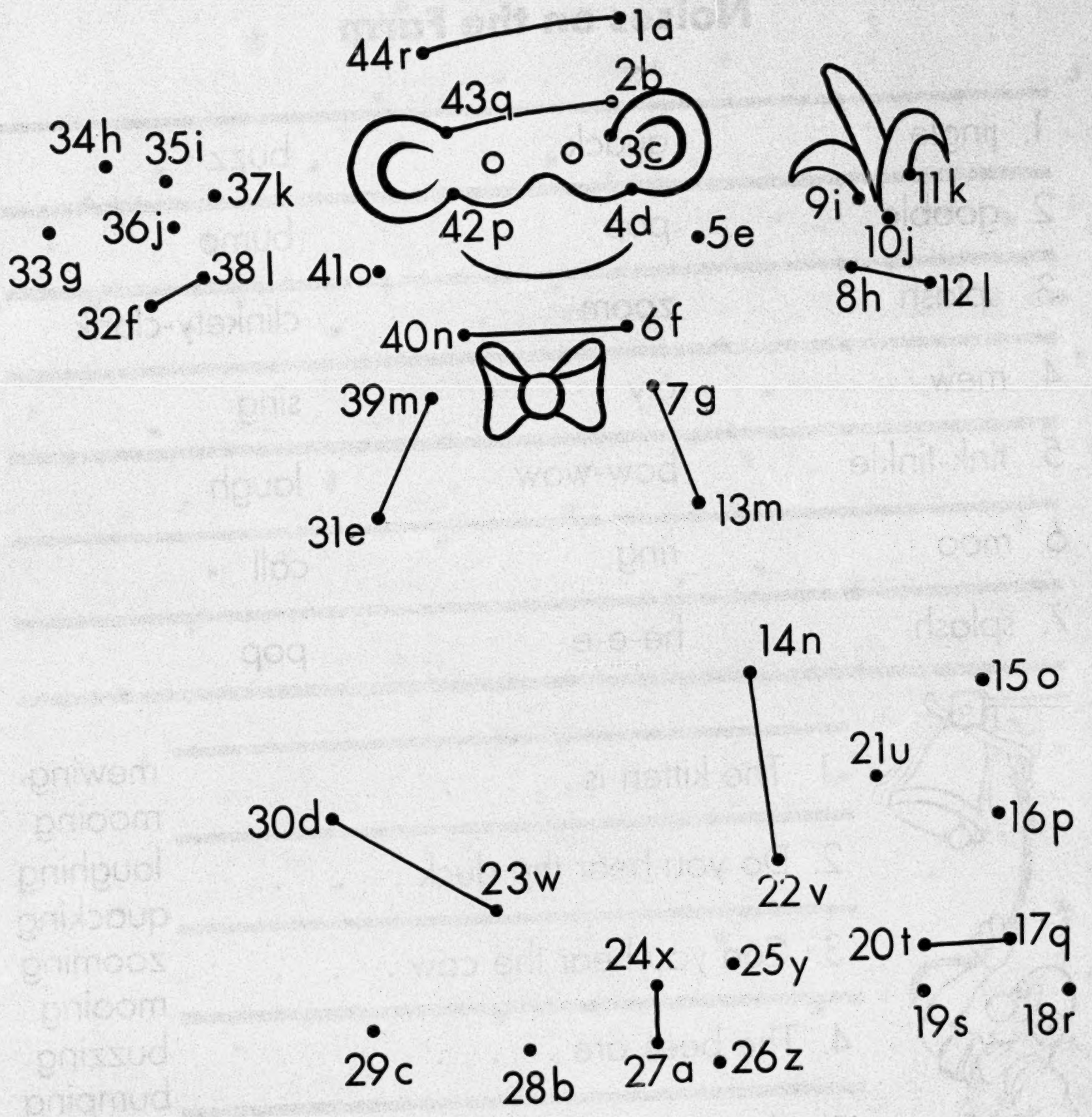


Find and Color the Zoo Animals

1. Look for a camel in a tree.
2. Find the monkey next to the house.
3. A hippopotamus is in the water.
4. Find the zebra across the brook.
5. See the elephant by the hill.

How many zoo animals did you find? _____

Word of the Day



23 8 27 20 9 19 20 34 5 6 21 14 14 25

13 15 14 11 31 25 31 1 20 35 40 7 ?

(thirty-five) 35

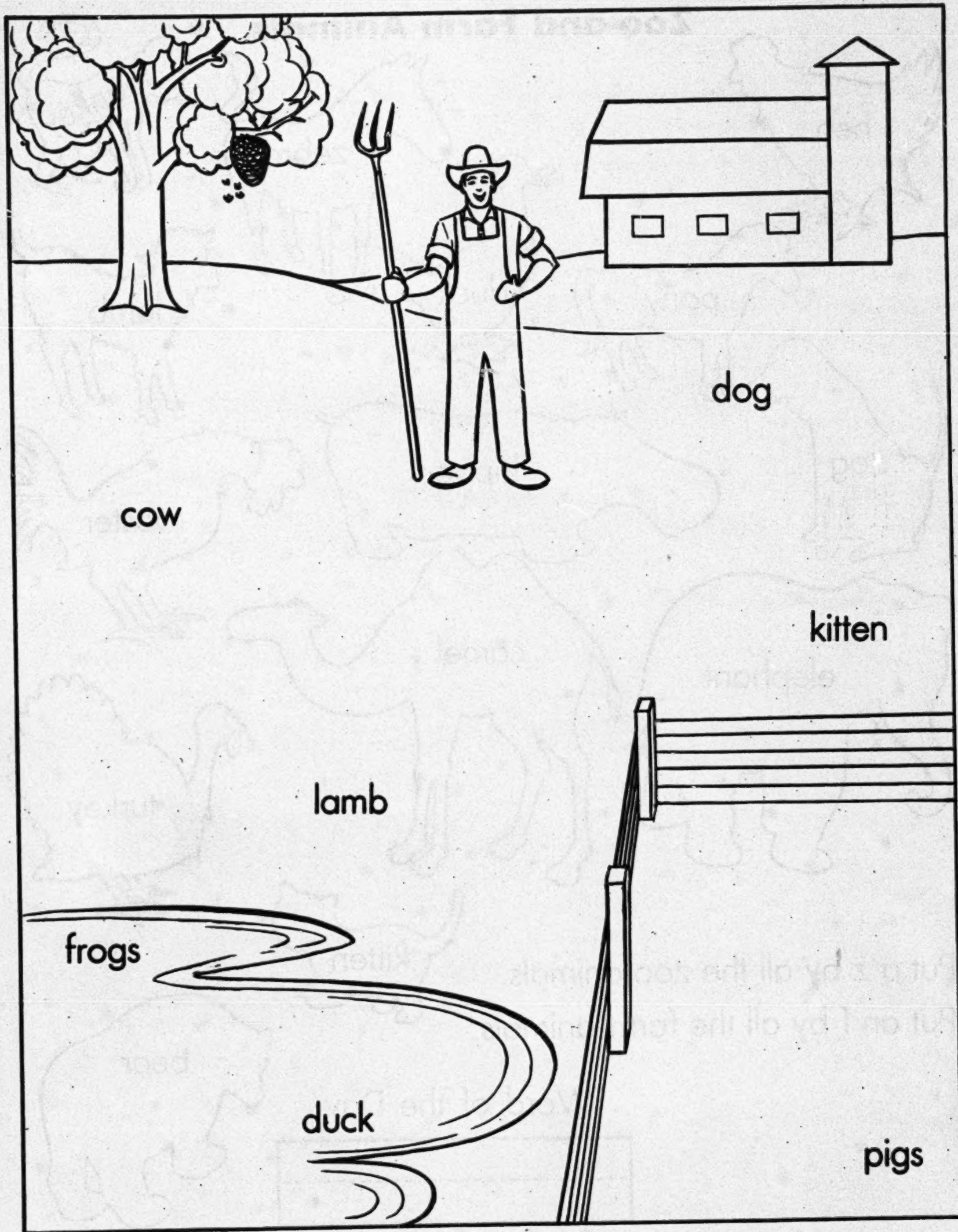
Noises on the Farm

1. jingle	quack	buzz
2. gobble	pop	bump
3. splash	zoom	clinkety-clank
4. mew	cry	sing
5. tink-tinkle	bow-wow	laugh
6. moo	ring	call
7. splash	he-e-e	pop



- | | |
|----------------------------------|----------|
| 1. The kitten is . . . | mewing |
| 2. Do you hear the duck . . . | mooing |
| 3. Can you hear the cow . . . | laughing |
| 4. The bees are . . . | quacking |
| 5. The farmer is . . . the pigs. | zooming |
| | mooing |
| | buzzing |
| | bumping |
| | crying |
| | calling |

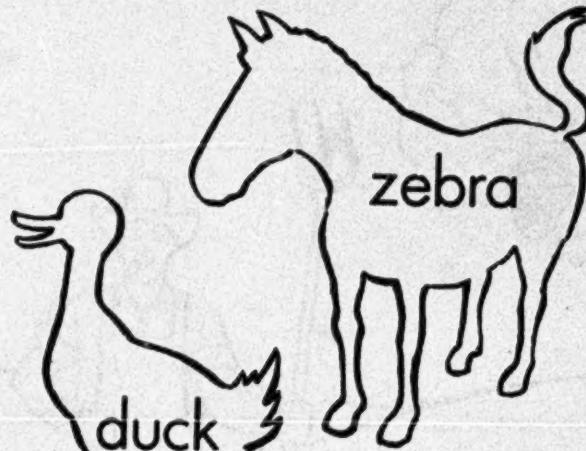
Word of the Day



Zoo and Farm Animals



hen



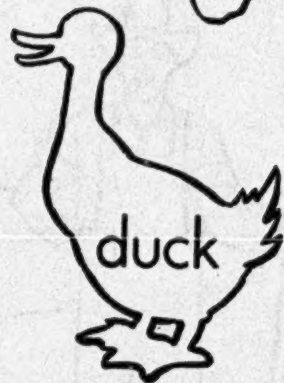
zebra



monkey



pony



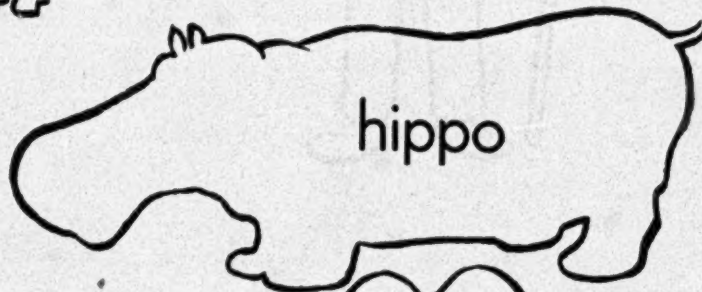
duck



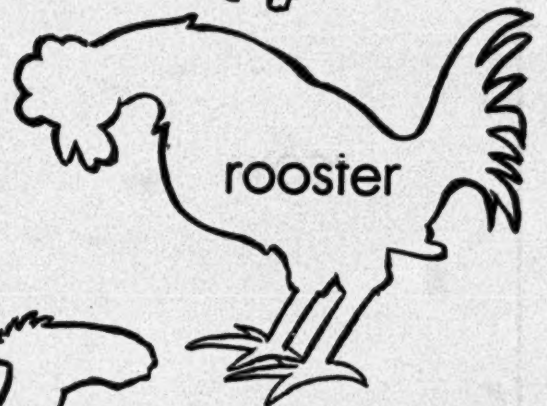
lamb



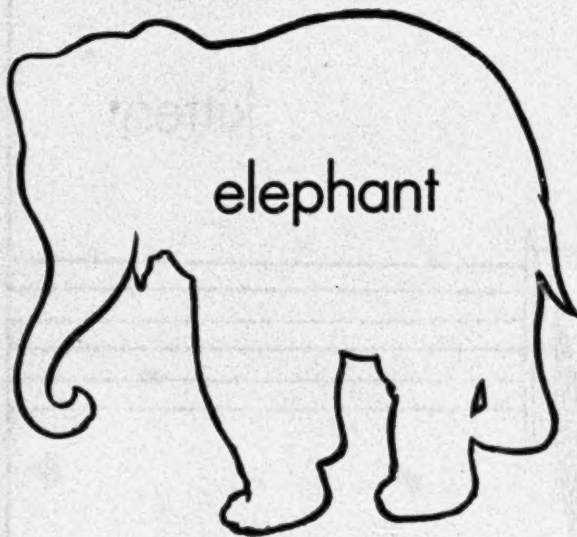
dog



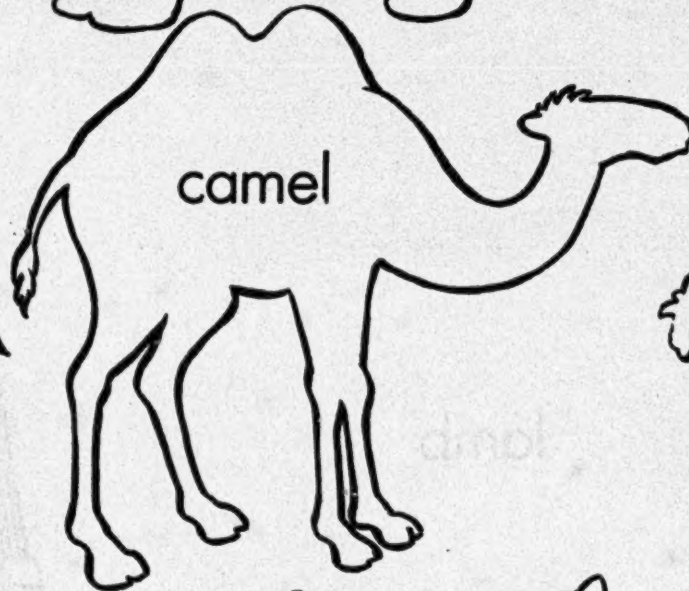
hippo



rooster



elephant



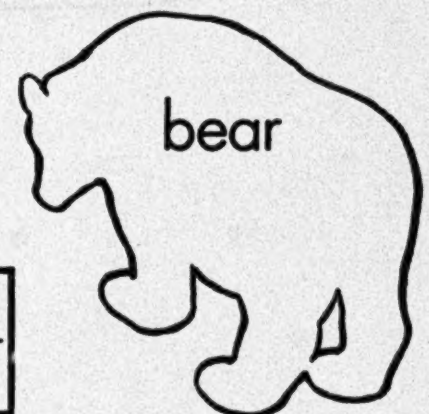
camel



turkey



kitten



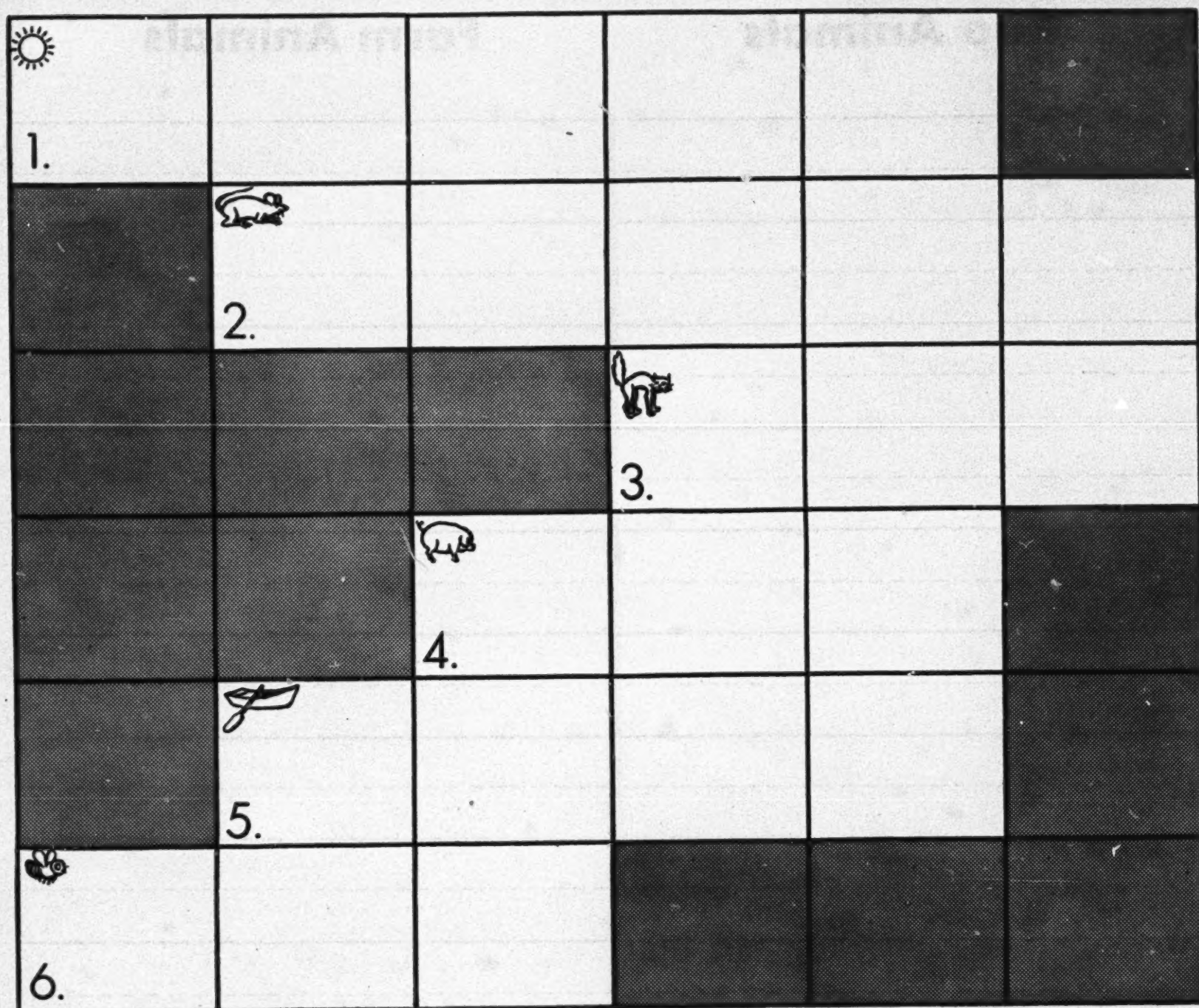
bear

Put a z by all the zoo animals.
Put an f by all the farm animals.

Word of the Day

Zoo Animals

Farm Animals



1. funny

2. house

3. bat

4. big

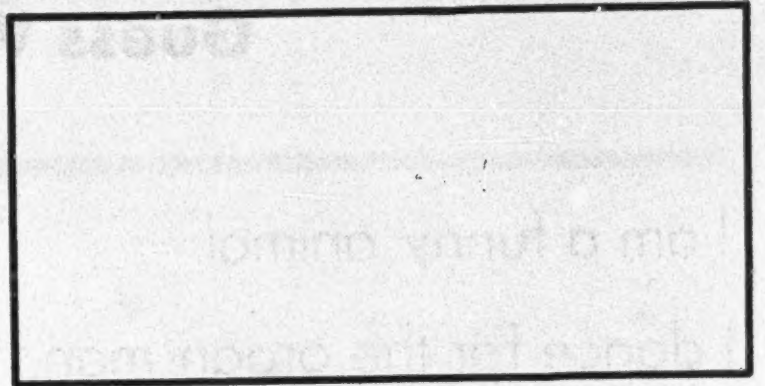
5. goat

6. tree

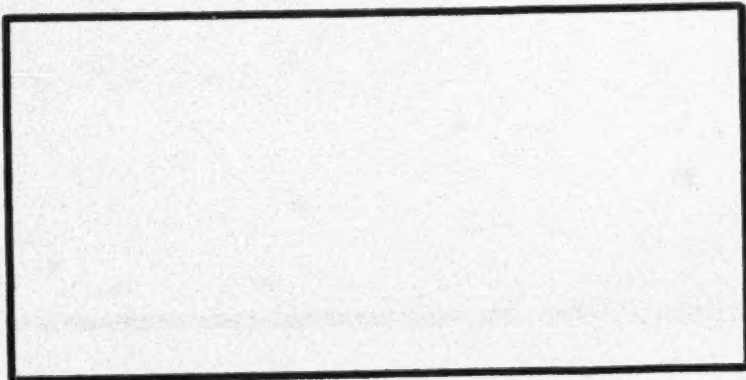
40 (forty)



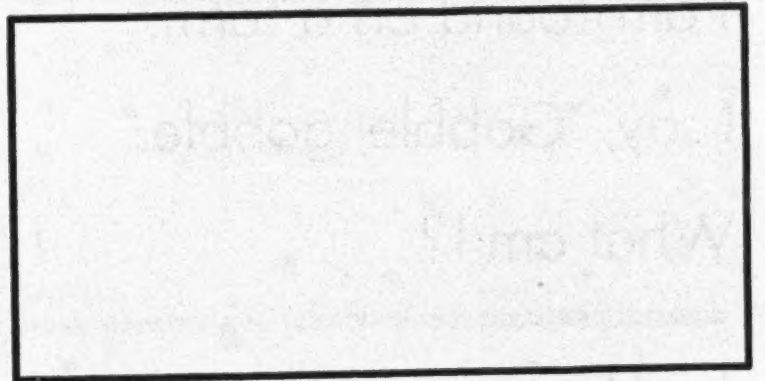
_____ inosaur



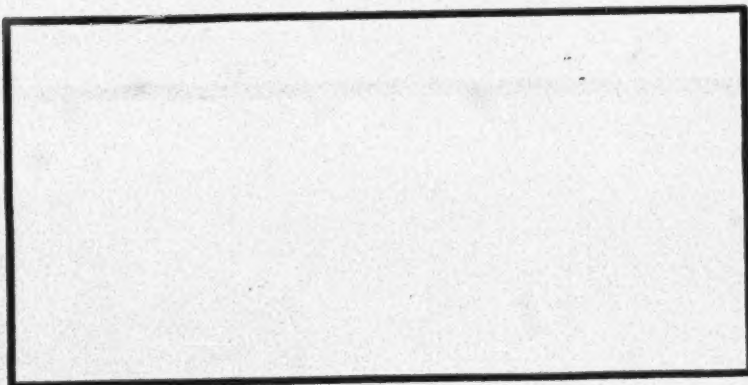
_____ og



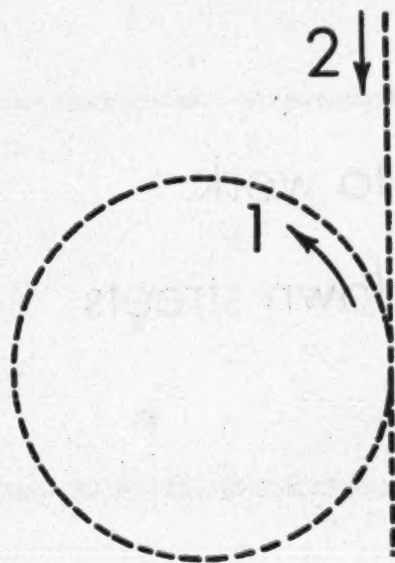
_____ inner



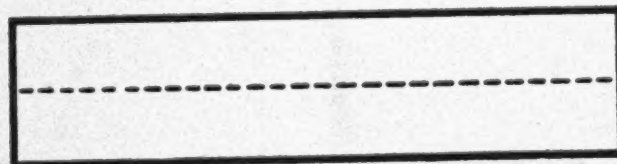
_____ oll



_____ uck



Word of the Day



Guess What I Am?

I am a funny animal.
I dance for the organ man.
What am I?

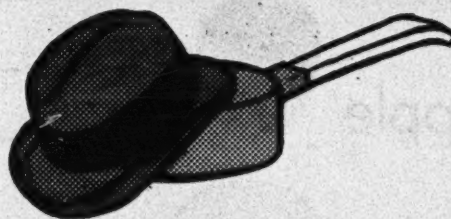
I am found on a farm.
I say, "Gobble, gobble."
What am I?

I make a good pet.
I say, "Mew, mew."
What am I?

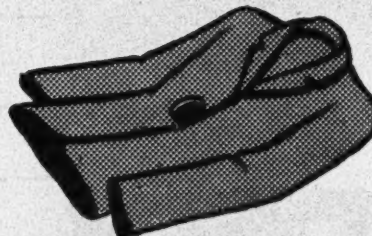
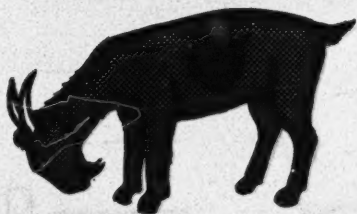
I take Father to work.
I go up and down streets.
What am I?

I can hop.
I have big ears.
What am I?

1. Should the hat be on the man or on the pan?



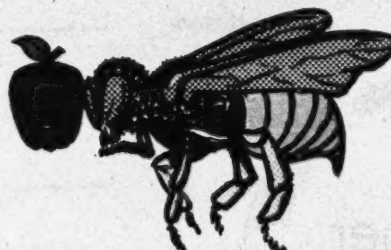
2. Should the button be on the goat or on the coat?



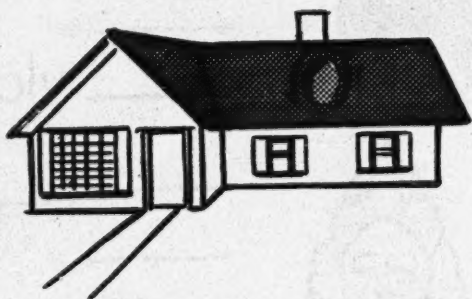
3. Should the feather be on the hat or on the cat?



4. Should the apple be on the tree or on the bee?



5. Should the ear be on the house or on the mouse?



Word of the Day

pple



et



ing



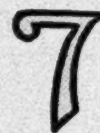
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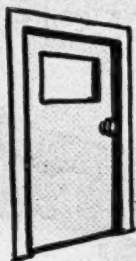
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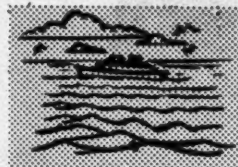
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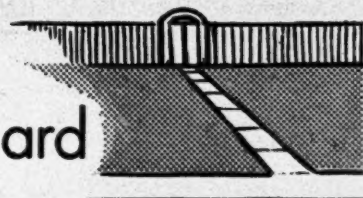
and



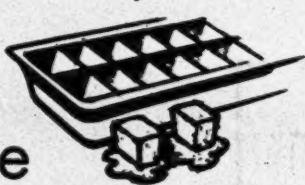
ueen



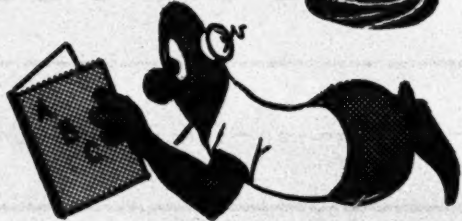
ard



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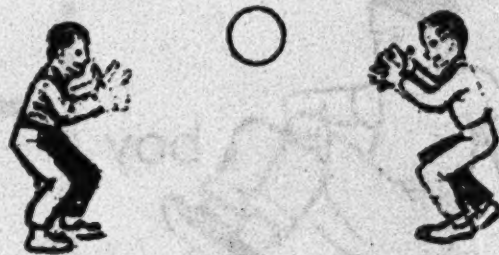
ipper



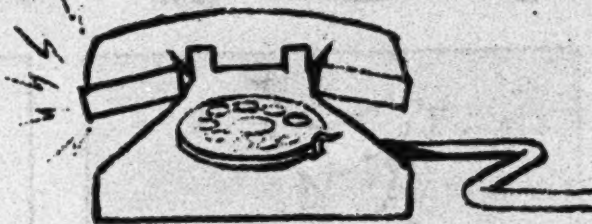
ipper



Eat it .



Catch it .



Hear it .



Plant it .



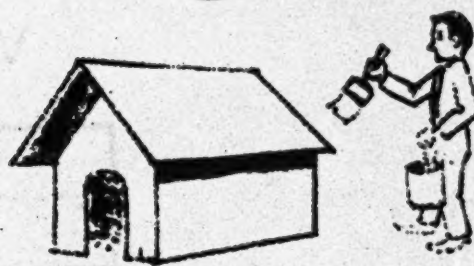
Ride it .



Pop it .



Paint it .



Bring it .



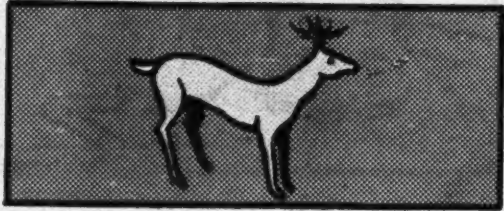
boy

b

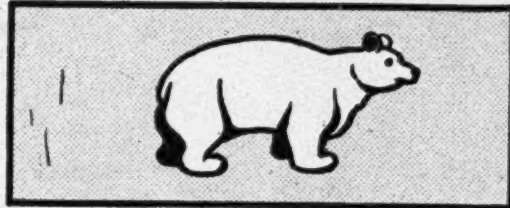


doll

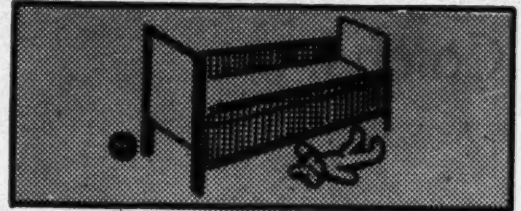
d



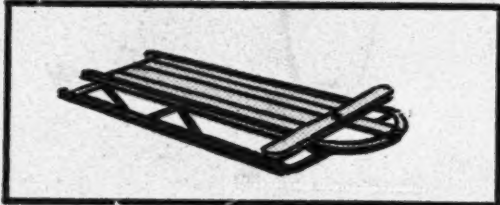
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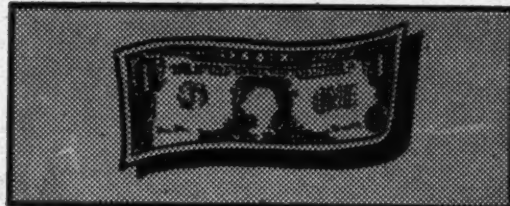
___ ear



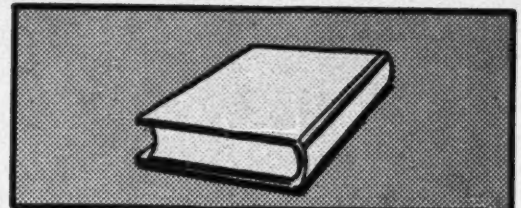
cri ___



sle ___



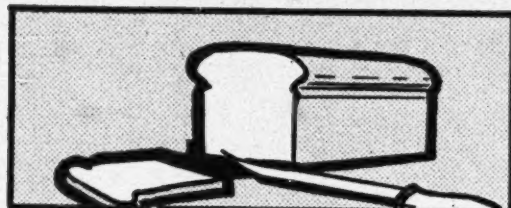
___ ollar



___ ook



___ ug



brea ___



___ aker



___ ir ___

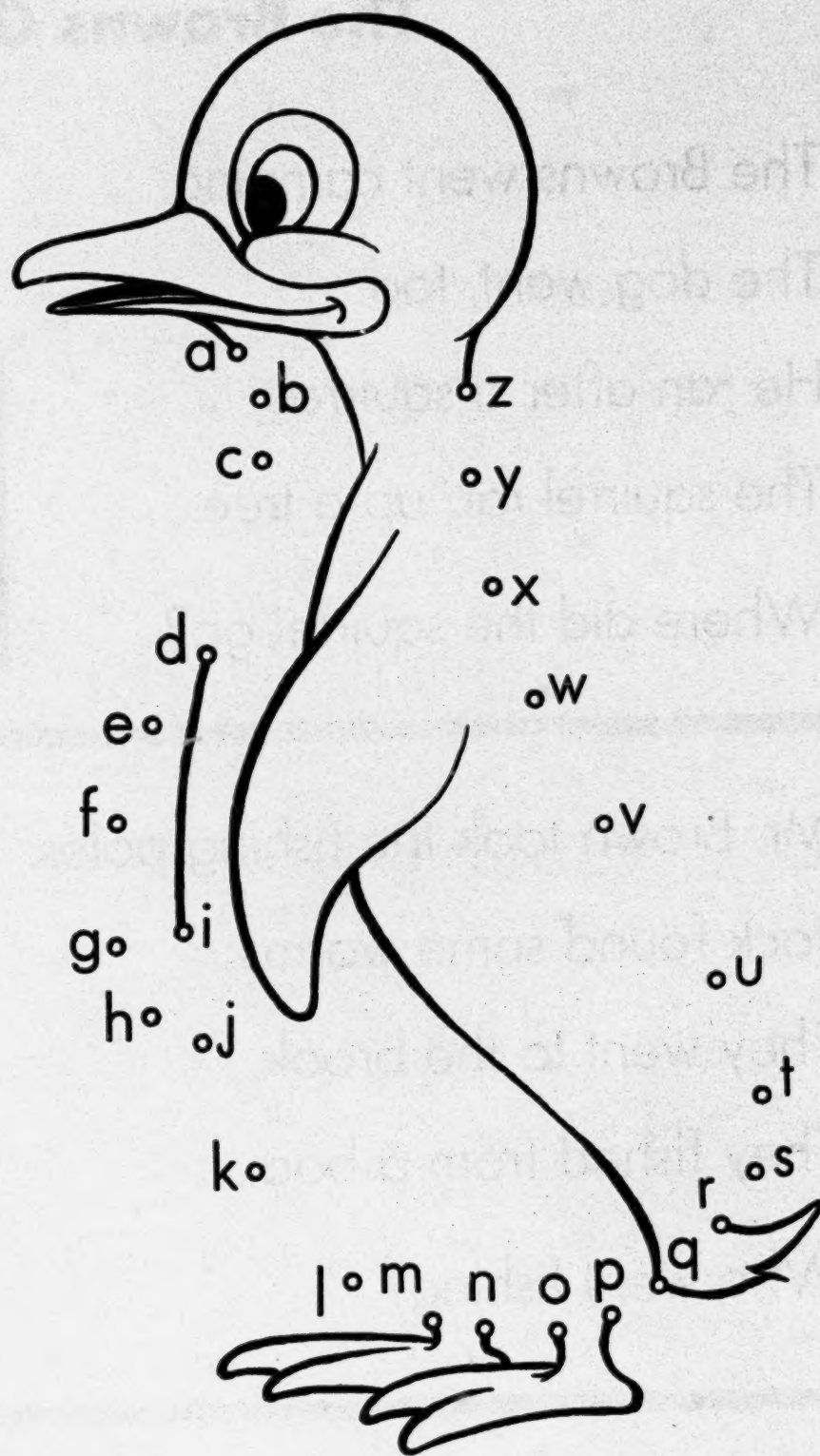


___ i ___



___ a ___

Word of the Day



I am like a man because I walk.

I am like a fish because I swim.

But I am not a man or a fish.

I am a ...ir....

But I cannot fly.

The Browns Go Camping

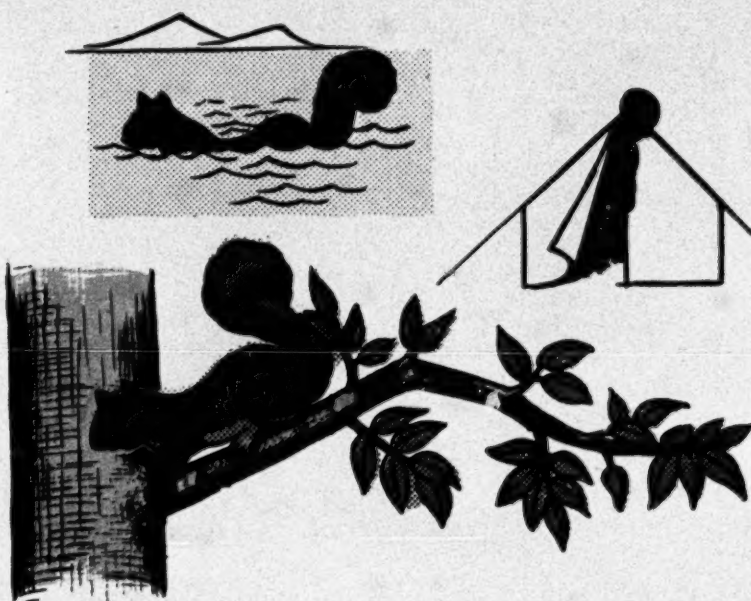
The Browns went camping.

The dog went, too.

He ran after a squirrel.

The squirrel ran up a tree.

Where did the squirrel go?



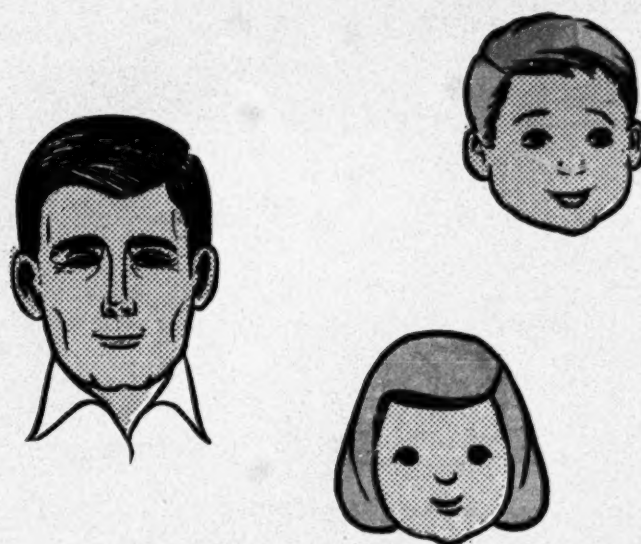
Mr. Brown took the fishing poles.

Jack found some worms.

They went to the brook.

They fished from a boat.

Who went fishing?



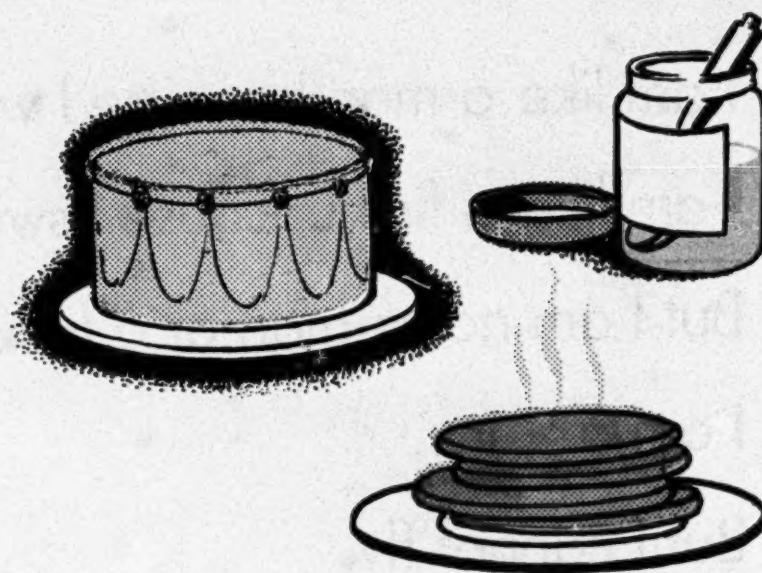
Mrs. Brown had a surprise.

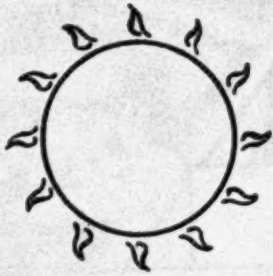
She had some pancakes.

Ann helped Mother.

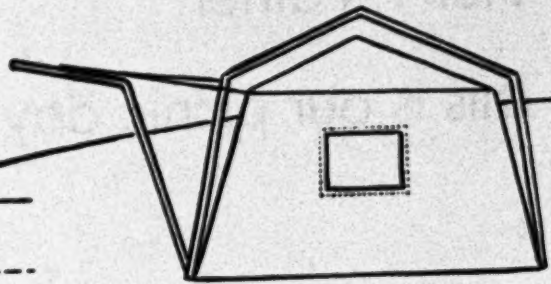
She put the honey on the table.

What was Mother's surprise?





u



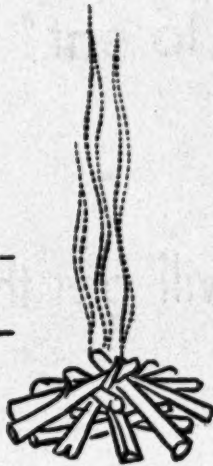
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or

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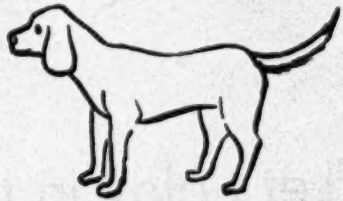
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Word of the Day

1. "Get up, Mother," said Jan and Bob.

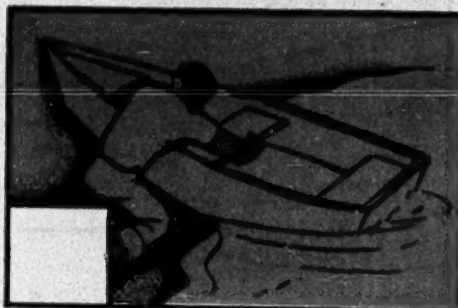
"Hurry, Father.

This is our picnic day."



2. "Put the cake in the basket," said Mother.

"It will be good to eat."



3. Father said, "I will get the boat ready.

Then we will go."



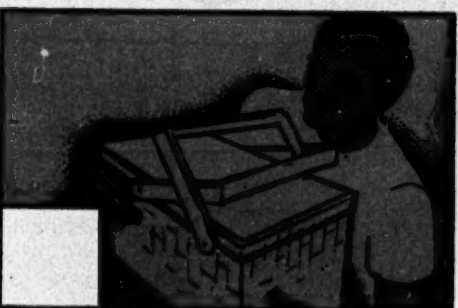
4. "Let's play in the water, Mother.

Bob and Father will fish," said Jan.



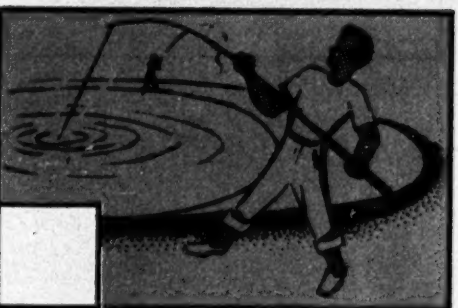
5. "Look, Mother," said Jan.

"See Bob catch a fish."



6. "Bring the basket, Father.

Now we can eat."



Things to Eat at a Picnic

apples

basket

honey

candles

cake

walk

fish

ice cream

eggs

corn

farm

airplanes

dress

bread

dinner

Things to Do at a Picnic

eat cake

fish in a tree

work in the garden

play in the water

catch a chair

run on your nose

catch a ball

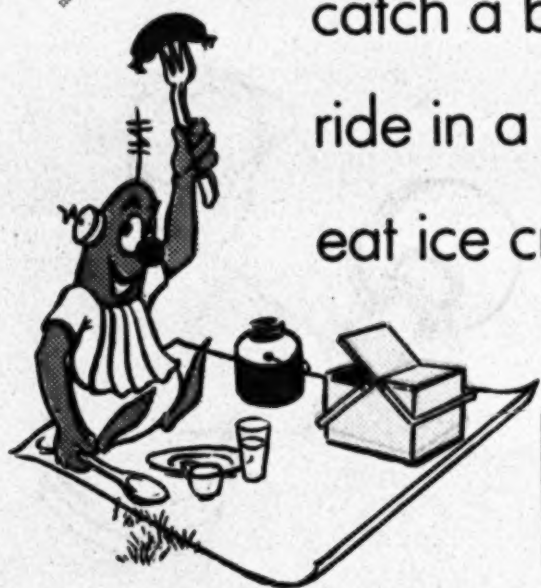
run a race

ride in a boat

play with a ball

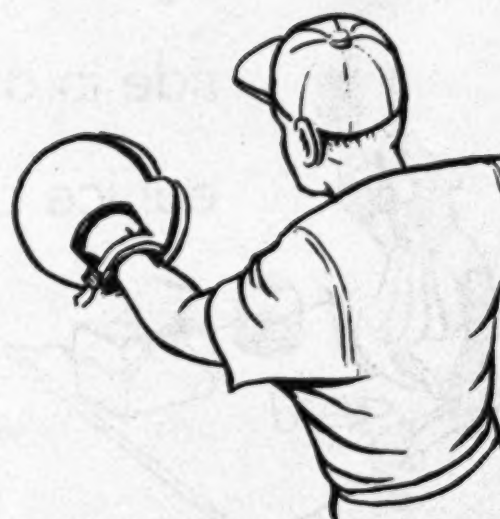
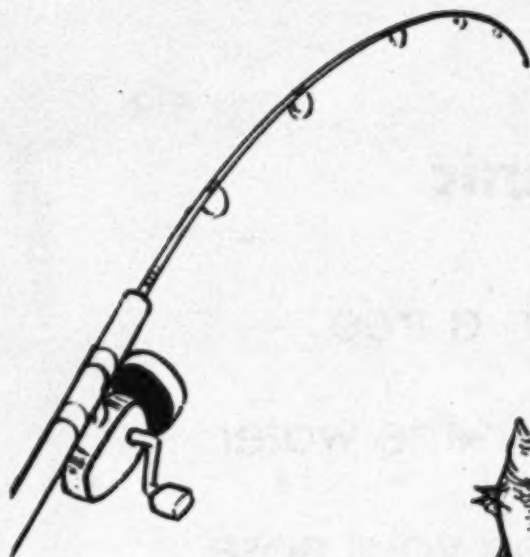
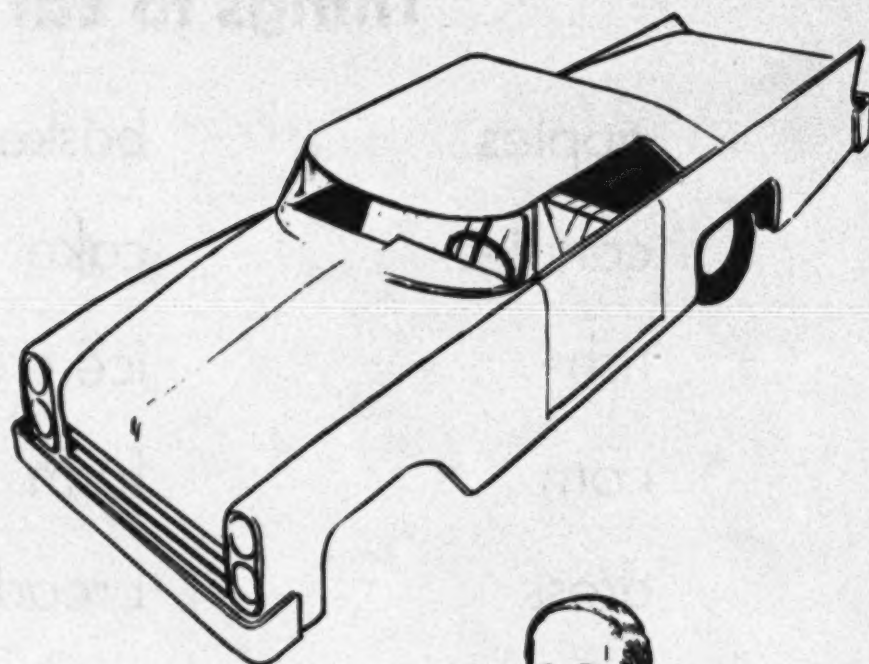
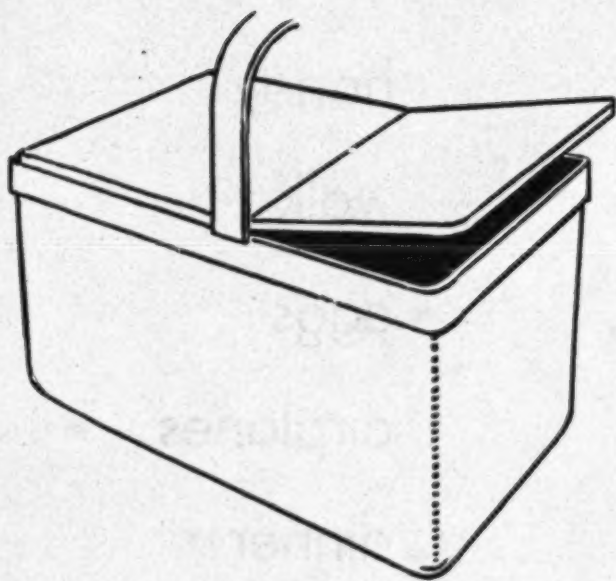
eat ice cream

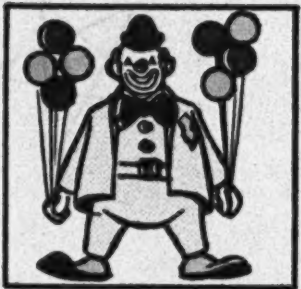
eat a balloon



Word of the Day

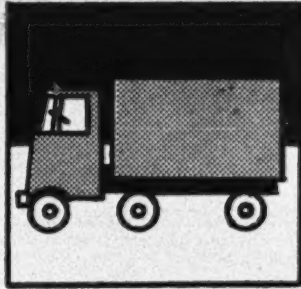
What's Missing?





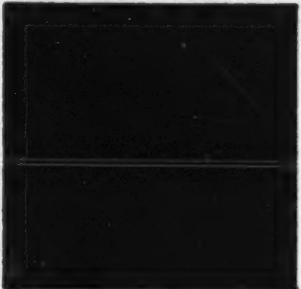
_____ down

 _____ own



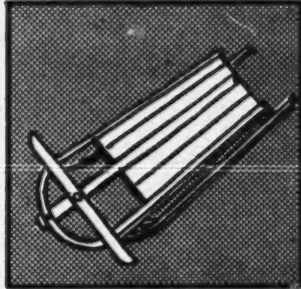
_____ duck

 _____ uck



_____ Jack

 _____ ack



_____ bed

 _____ ed



_____ look

 _____ ook



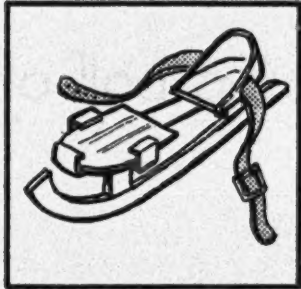
_____ eat

 _____ eat



_____ hop

 _____ op



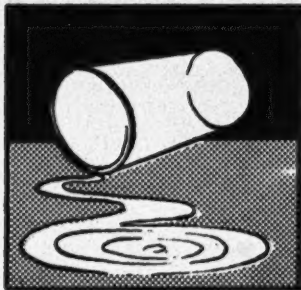
_____ ate

 _____ ate



_____ bag

 _____ ag



_____ mill

 _____ ill

br



sl

fl

tr

wh

st

bl

sp



Who Is Up?



Zoom!

Off we go.

We are going up, up.

We are going fast.

Let's see what we can see.

We will go around and around.

Look! See the big ball of fire.

It is the sun.

Look on the other side of us.

Who is that?

He is funny.

He looks like this:



Word of the Day



Sounds Around Us

All around us we can hear.

Sounds people make as they come near.

Tink-tinkle

He brings ice cream white and pink.

First look for cars - then stop and think.



R-ring

R-ring

She knows just where to look

To find a wonderful book.



Wh-e-e

Wh-e-e

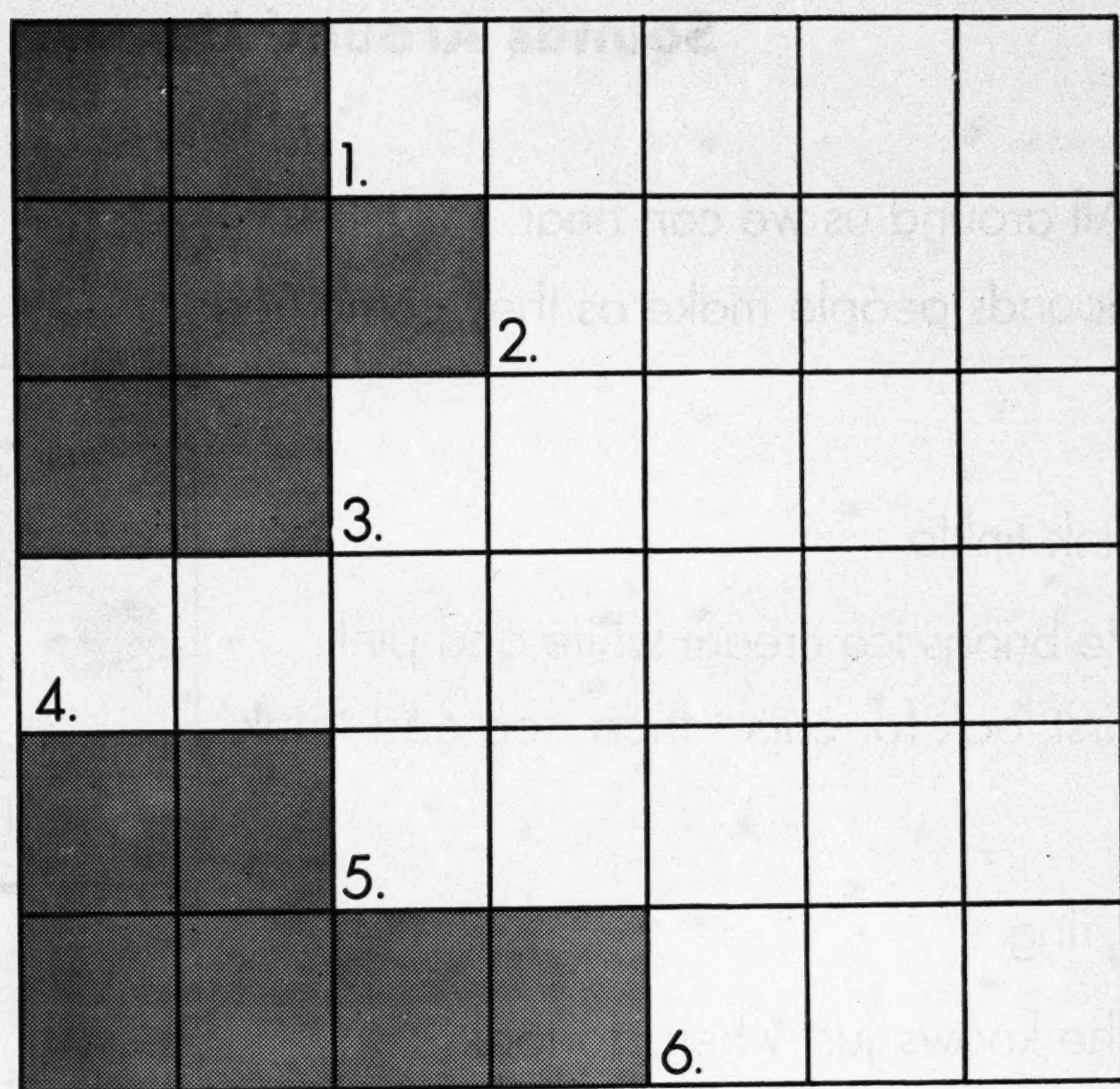
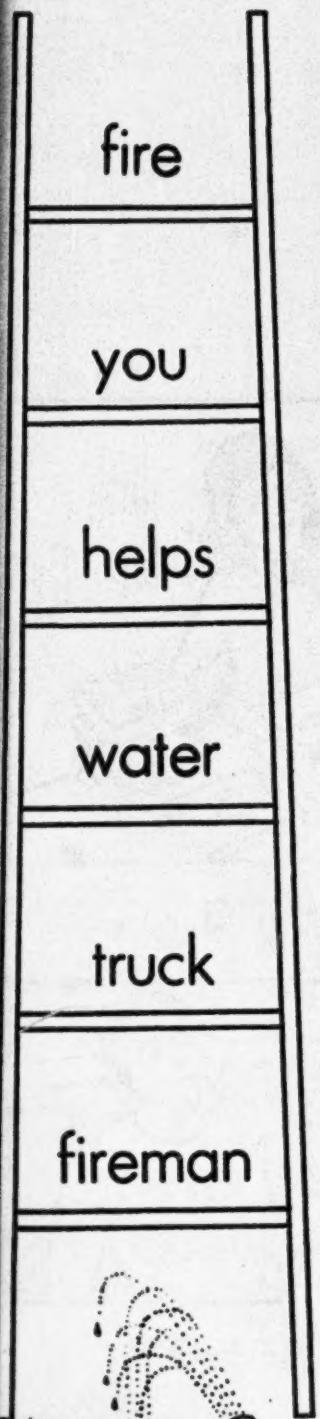
When we go in the water to play,

He helps us have a happy day.

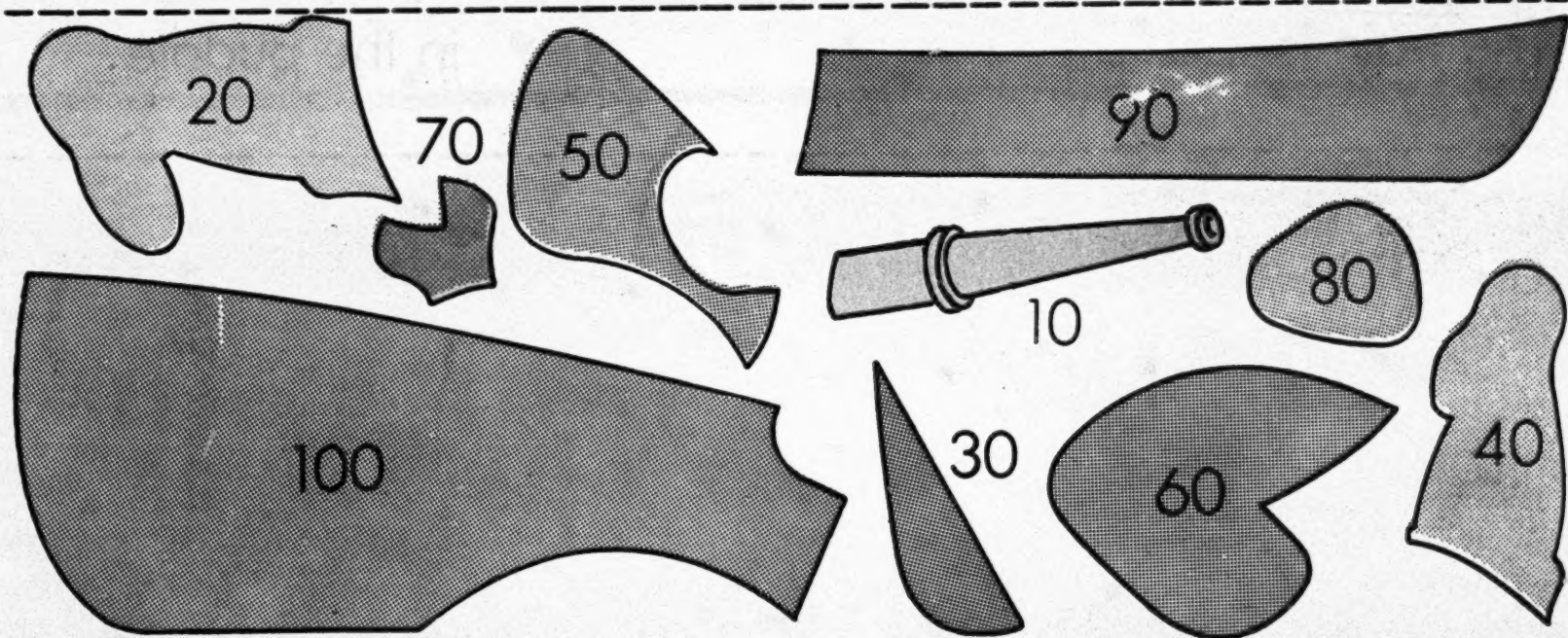
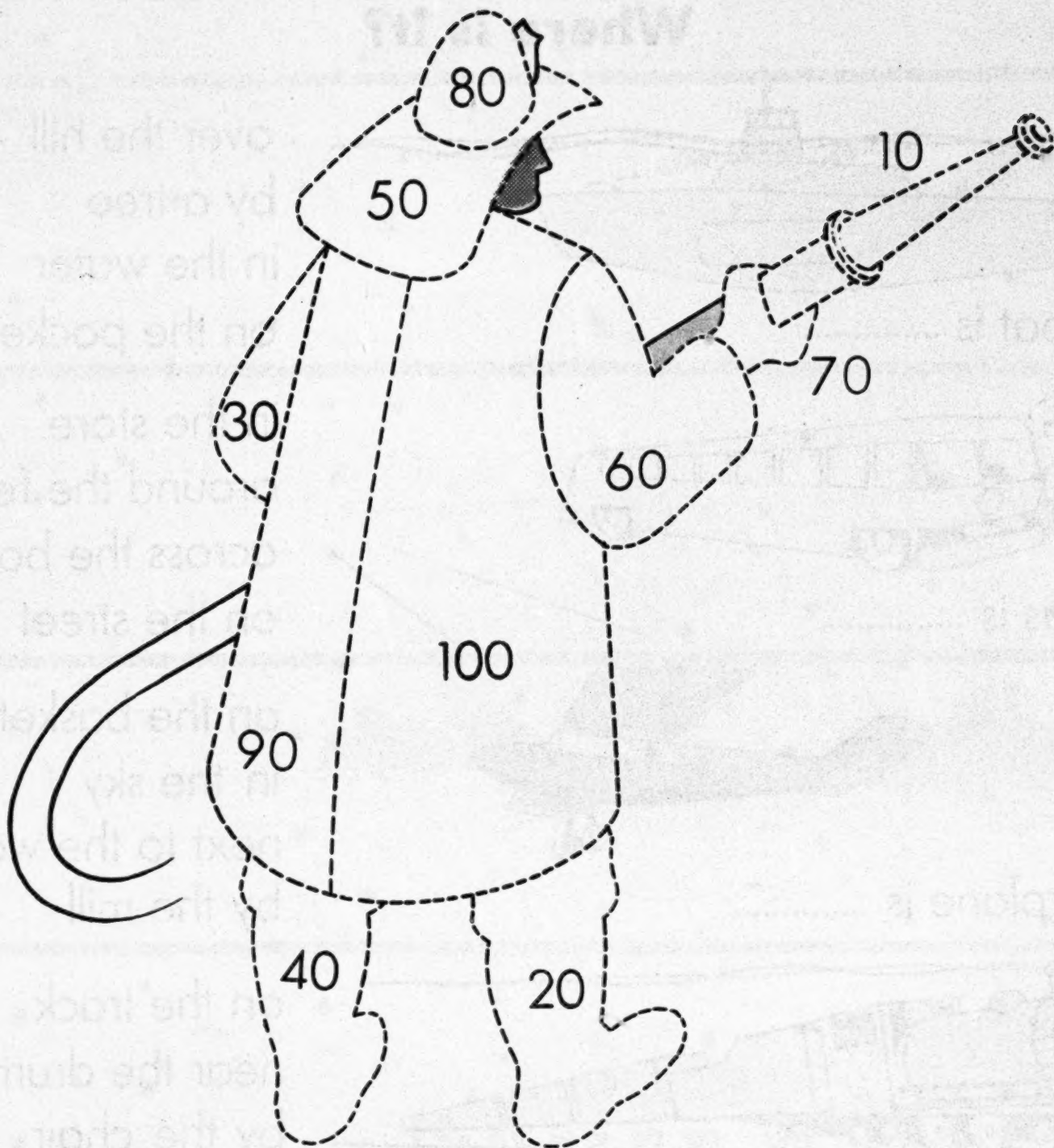


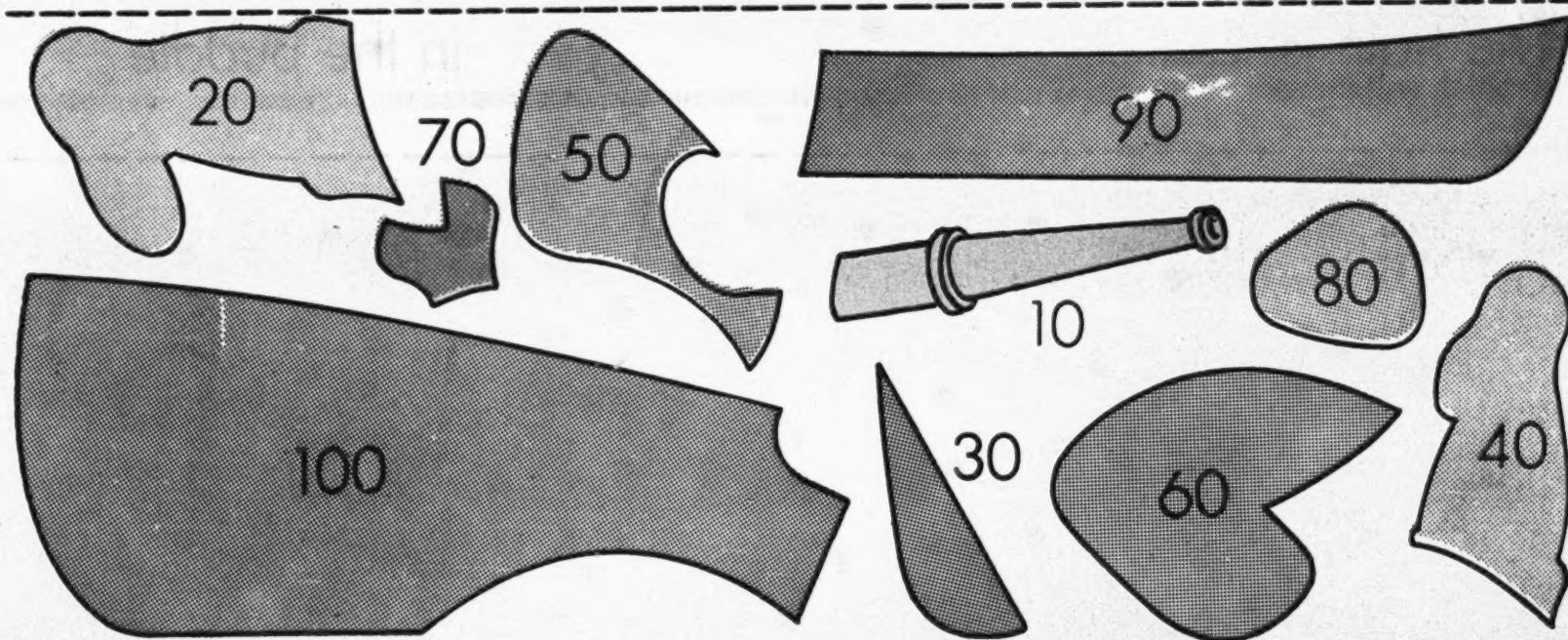
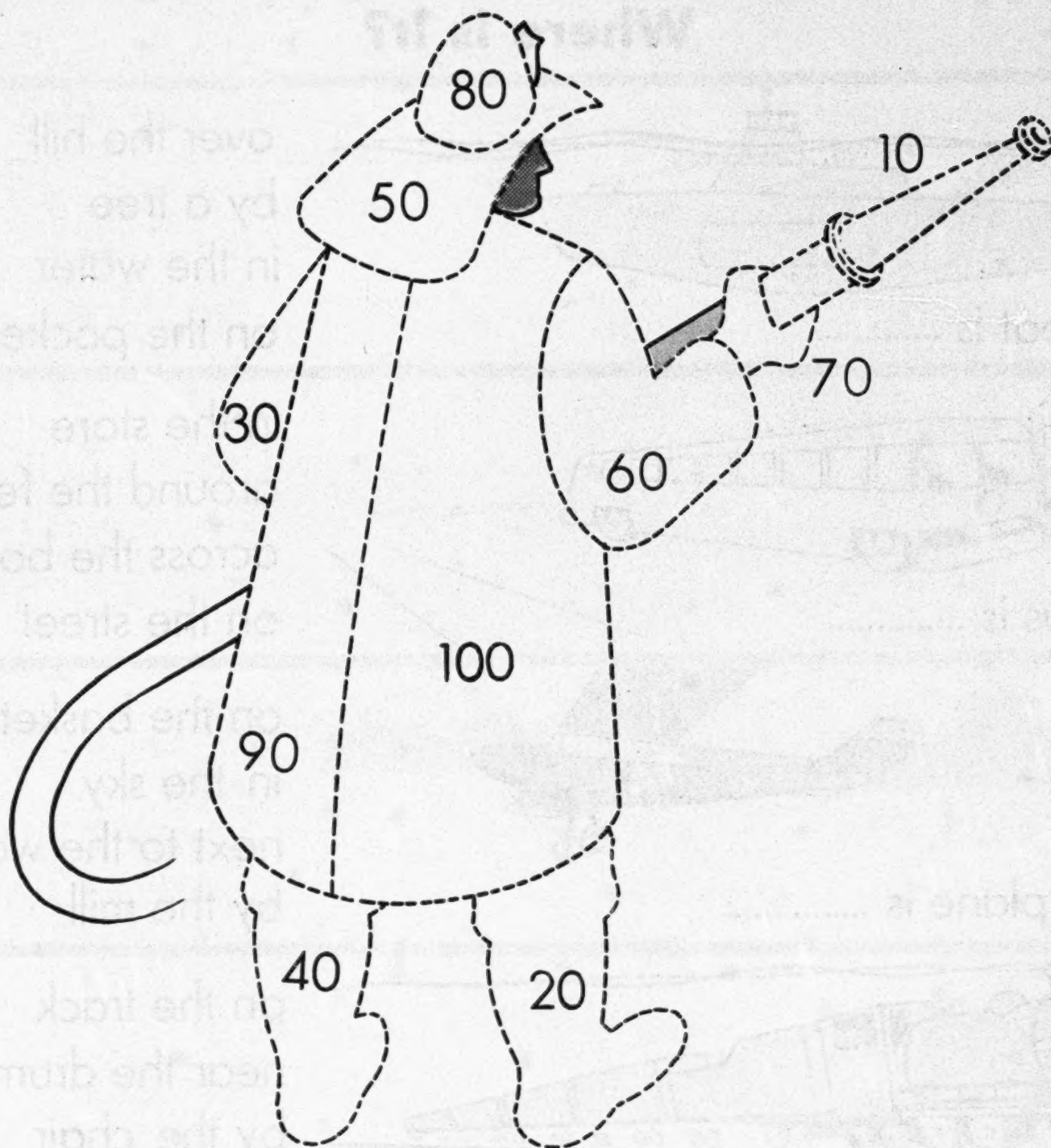
Tink-tinkle

Word of the Day



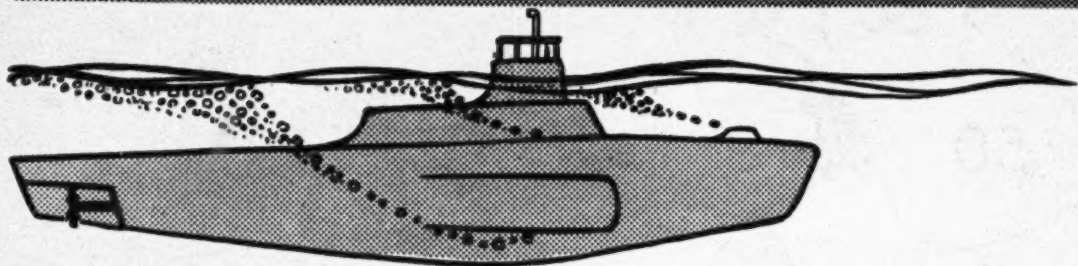
1. The fireman . . . to keep us safe.
2. We call him when there is a . . .
3. He brings his . . . to your house.
4. The . . . puts water on the fire.
5. The . . . makes the fire go out.
6. . . . must be the fireman's helper.





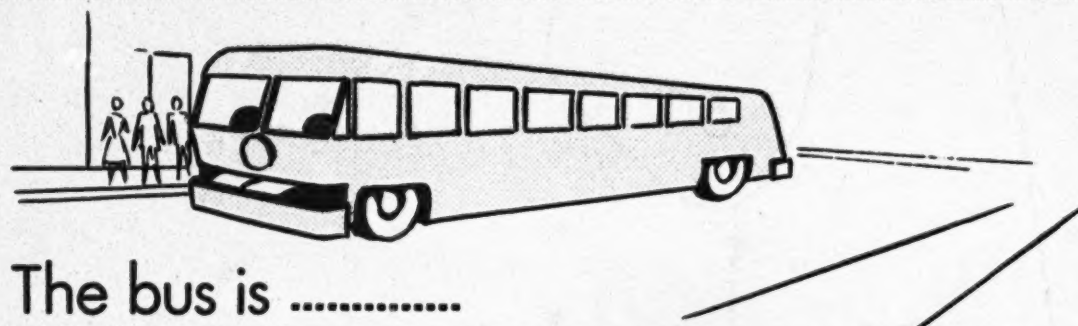
(fifty-seven) 57

Where Is It?



The boat is

over the hill
by a tree
in the water
on the pocket



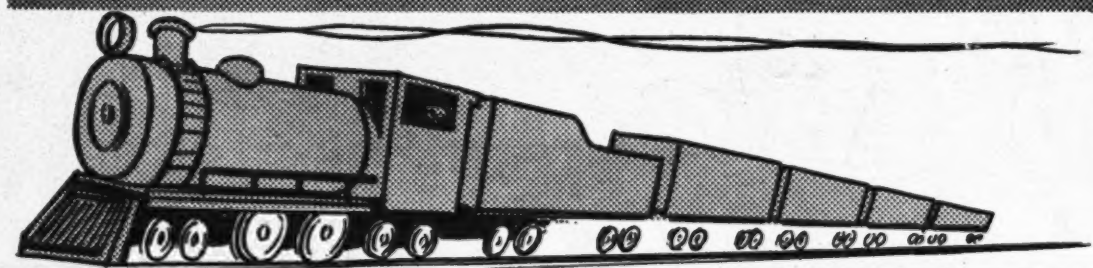
The bus is

in the store
around the fence
across the box
on the street



The airplane is

on the basket
in the sky
next to the wagon
by the mill



The train is

on the track
near the drum
by the chair
in the puddle

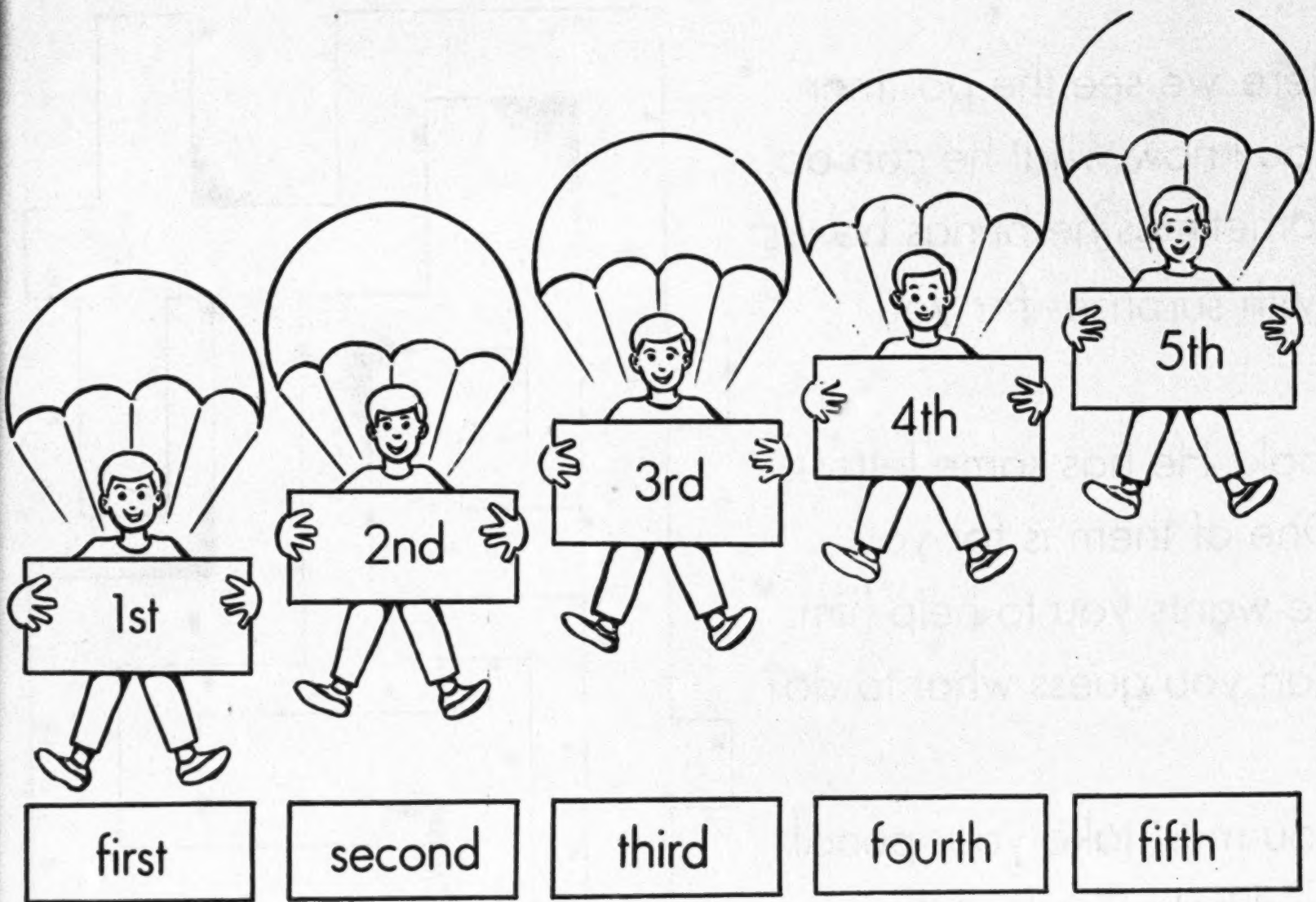
Here we see the postman.
You know what he can do.
Sometimes he brings boxes
With surprises for you.

Look! He has some letters.
One of them is for you.
He wants you to help him.
Can you guess what to do?

You must take your pencil
And help him find the way
So he can bring this letter
To your house right away.



Word of the Day



Color the first one yellow.

Color the fourth one green.

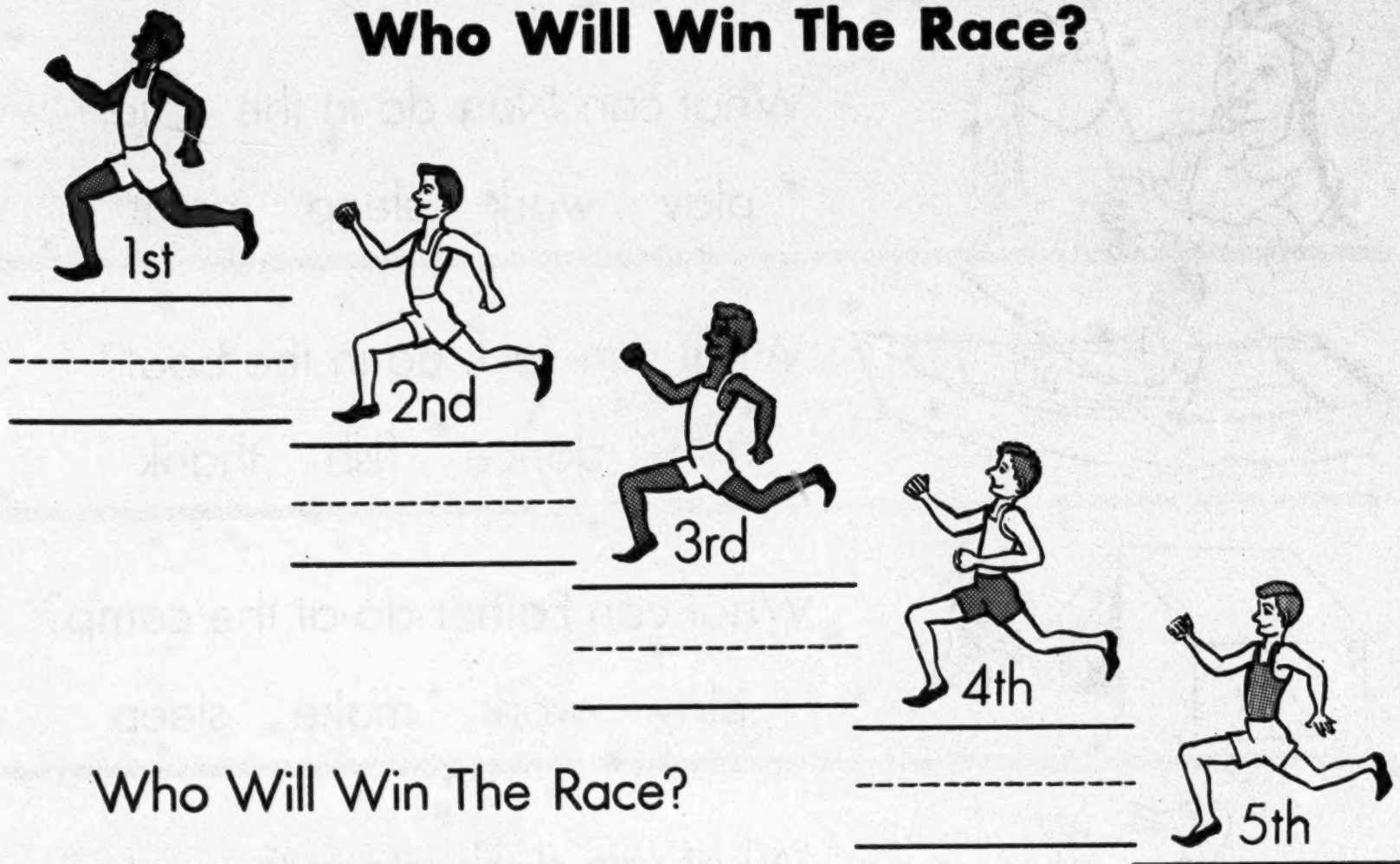
Color the third one purple.

Color the fifth one orange.

Color the second one blue.

Word of the Day

Who Will Win The Race?



Who Will Win The Race?

It was summer time.

The boys wanted something to do.

They had a race.

Five boys ran in the race.

Ben was fourth.

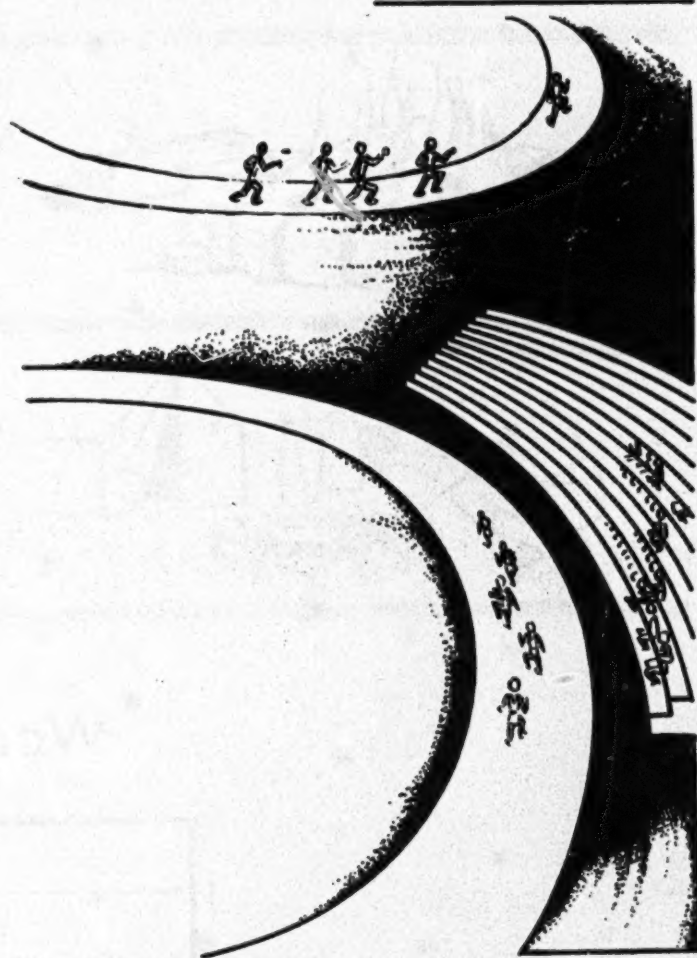
Tom was third.

Fred was last.

Jim was second.

Bill came in first.

All the boys had fun.





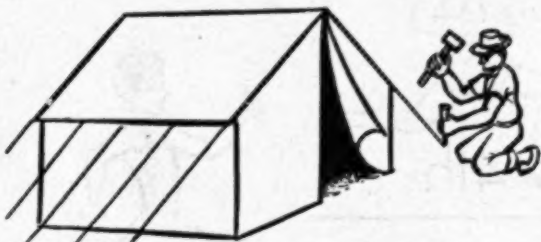
What can Nan do in the water?

play work sleep paint



What can Jack do in the boat?

farm dance fish thank



What can Father do at the camp?

play work make sleep



What can ducks do in the water?

stop play laugh swim



What can you do to your campfire?

put it out put it on make it go



What can Mother do at the camp?

candles feather cook night

Word of the Day



uns



tca



nma



dgo



ehn



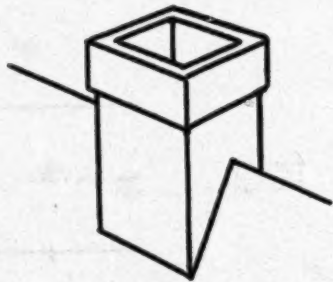
xof

ch ickens

sh eep



oe



imney



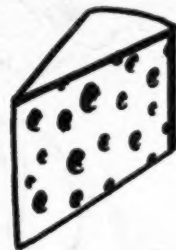
air



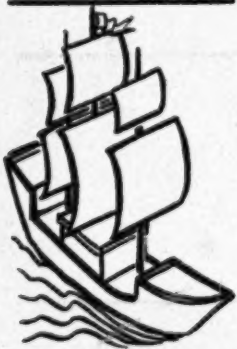
in



ower



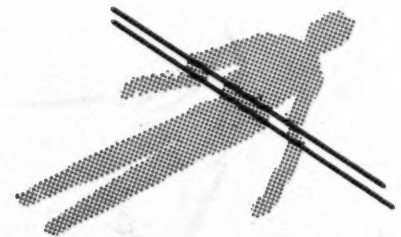
eeze



ip



erry

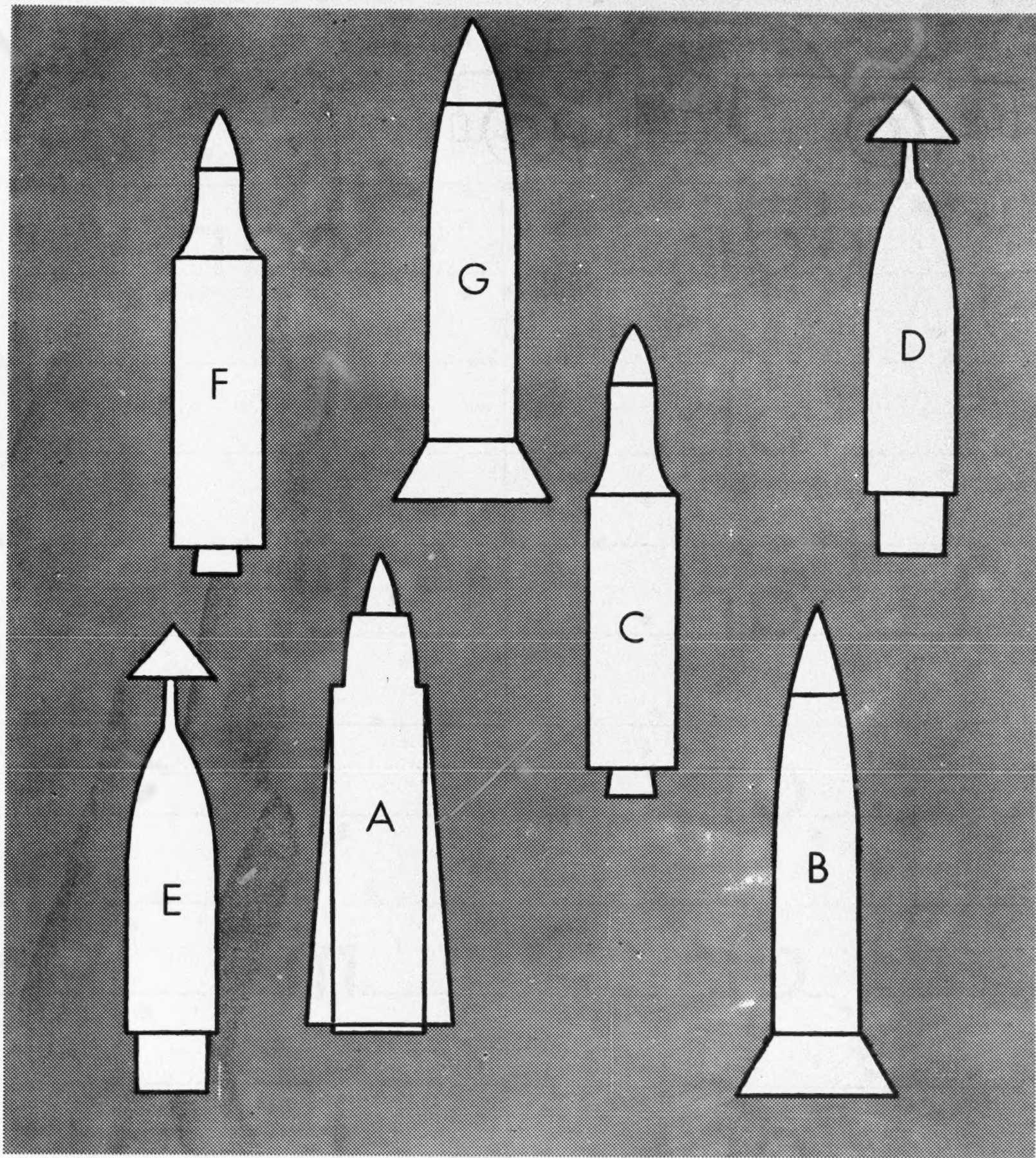


adow

Words of the Day

Blank writing box with a dashed line for handwriting practice.

Blank writing box with a dashed line for handwriting practice.



Which ones are alike?

_____ and _____

_____ and _____

_____ and _____



car

car

ar

f

ar

b

ar

j

ar

m

ar

t

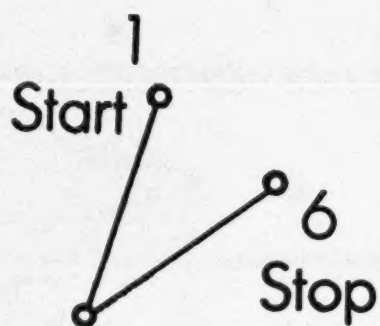
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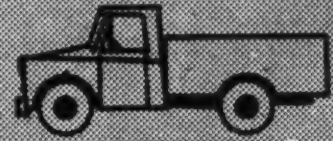


3

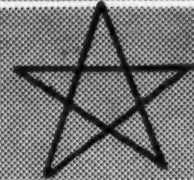
Word of the Day

What Is This?

1. Is this a truck or a duck?



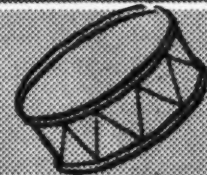
2. Is this a car or a star?



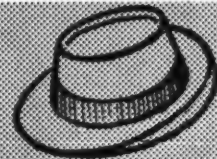
3. Is this a pig or a twig?



4. Is this gum or a drum?



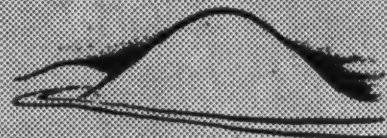
5. Is this a cat or a hat?



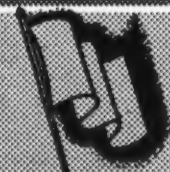
6. Is this a stick or a chick?



7. Is this a hill or a pill?



8. Is this a bag or a flag?



9. Is this a clown or a crown?



clown crown



Word of the Day



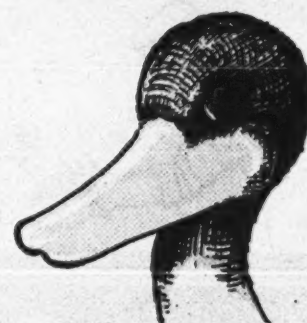
-
- 1 Ben was happy..
Ben had a new bicycle.
He lost it.

Now how does Ben look?



-
2. The duck was hot.
He could not find a puddle.
It rained.

Now how does the duck look?



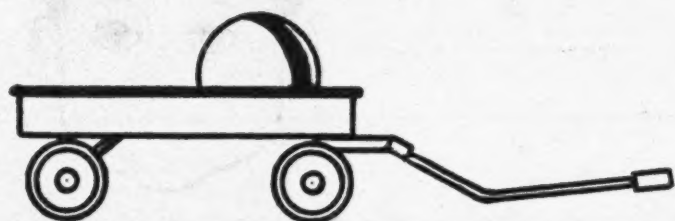
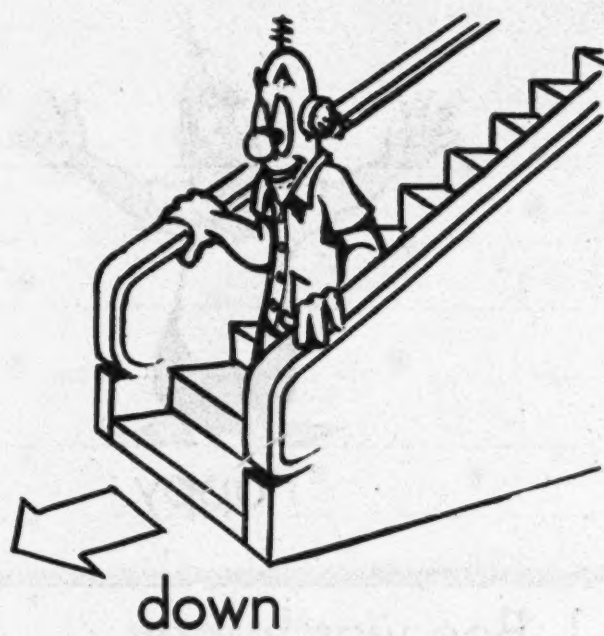
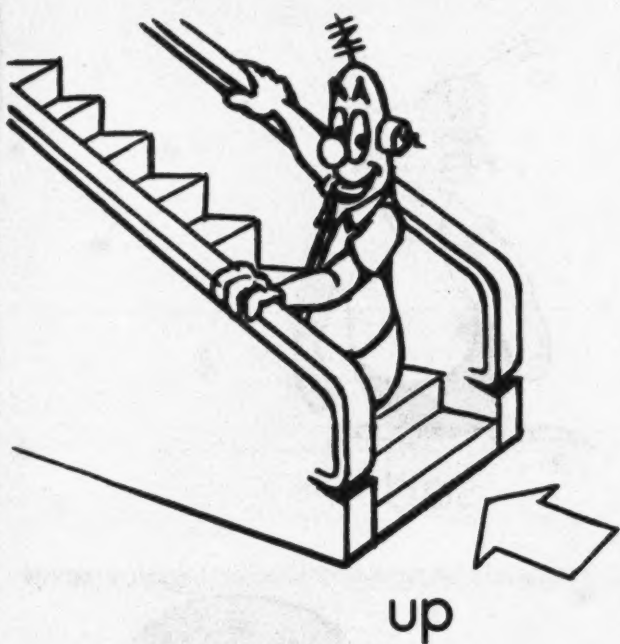
-
3. Susan was not happy.
She wanted to play.
Nancy came to play.

Now how does Susan look?



-
4. The rabbit wanted something to eat.
He saw some cabbage.
He could not get into the garden.
Now how does the rabbit look?





out



found



day



new



from



Find the Key

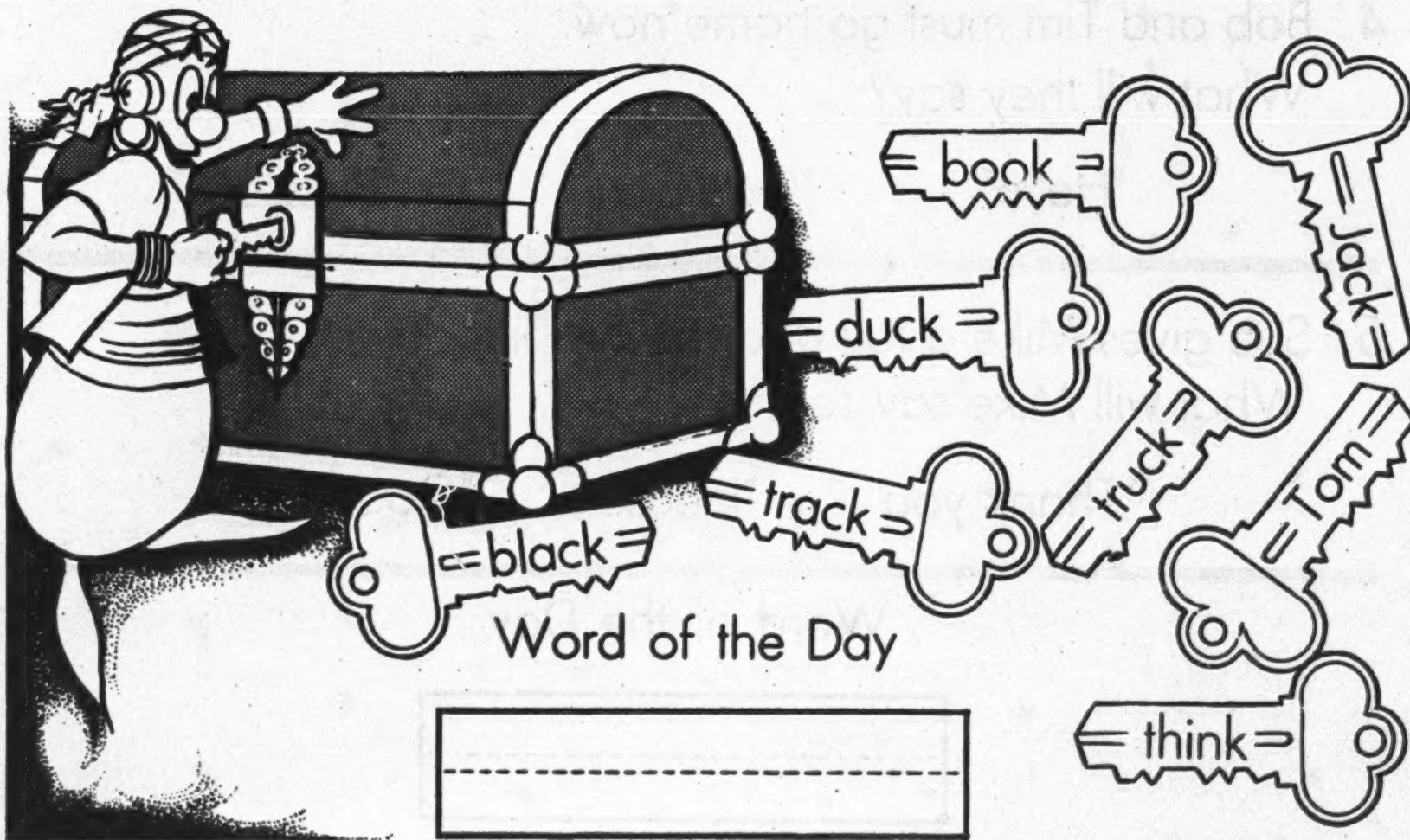
1. A _____ can quack.

2. You can hear the noise of the _____.

3. To read you must _____.

4. The boy who ran is named _____.

5. This is my summer fun _____.



1. Mary and Peter see a rooster.
Where could they be?

in a rocket at a farm on a box

2. A boy has a hat and a horse.
What could he play?

cowboy store dolls

3. Mrs. Black has a pan.
What do you think she will make?

a house a dress a cake

4. Bob and Tim must go home now.
What will they say?

"Hello" "Good-by" "Please"

5. Sue gives Mike a toy boat for his birthday.
What will Mike say to Sue?

"Thank you" "Please" "Good-by"

Word of the Day



1. red

2. black

3. yellow

4. white

5. green

6. blue

7. brown

8. orange

9. purple

Giant Words

something

colorbook

pocketbook

airplane

schoolgirl

seesaw

storybook

outside

everywhere

catfish

sunflower

campfire

honeybee

rocketship

popcorn

breadbox

summertime

raincoat

henhouse

inside

horseback

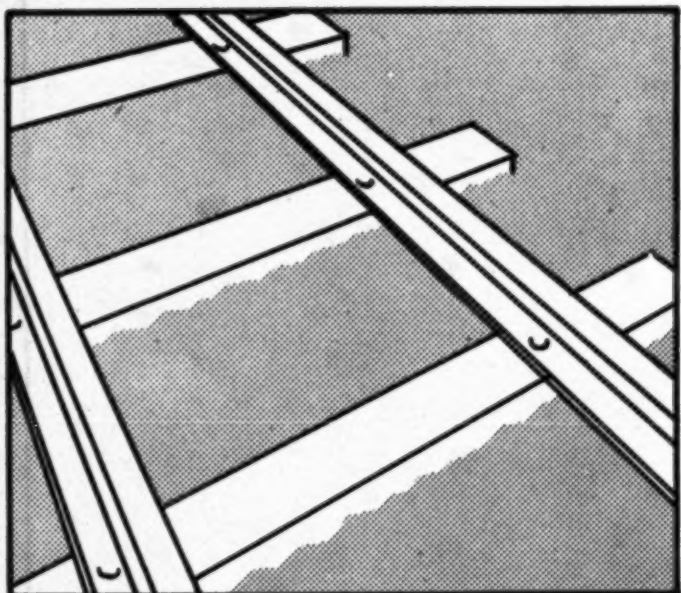
basketball

plaything

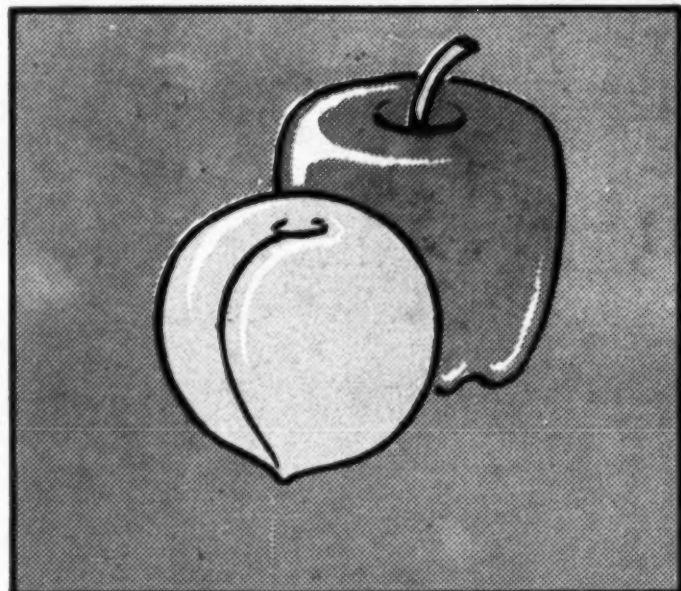
housecoat

My Giant Word

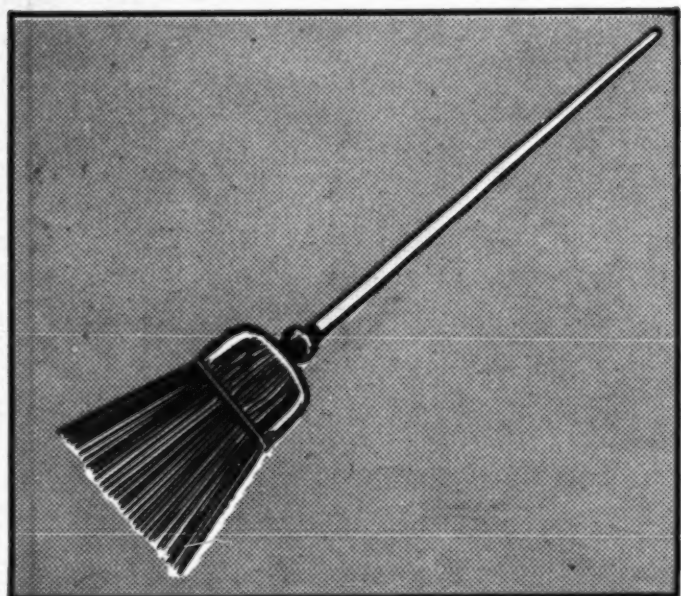




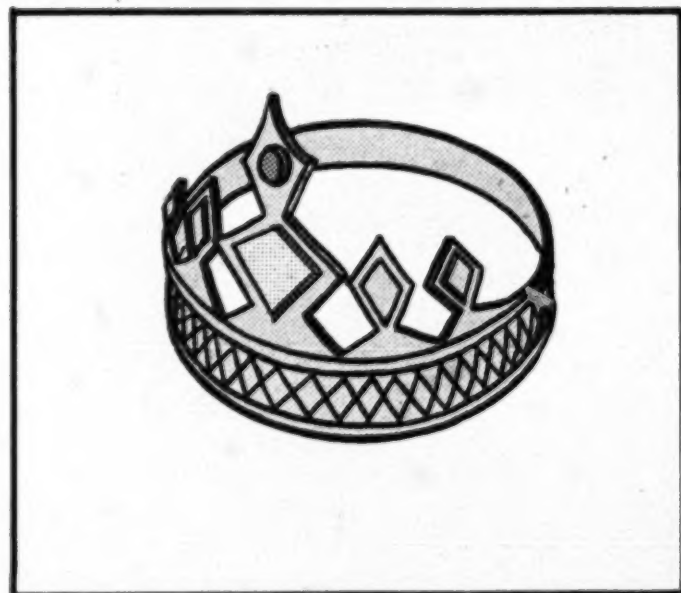
br



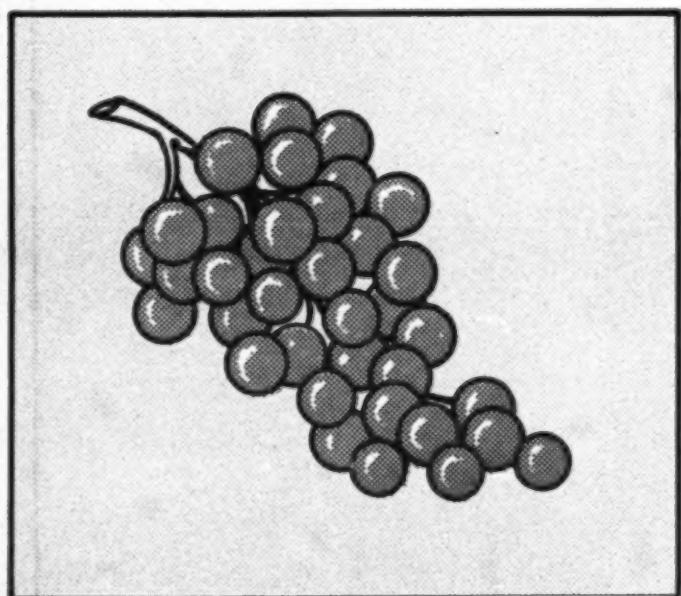
fr



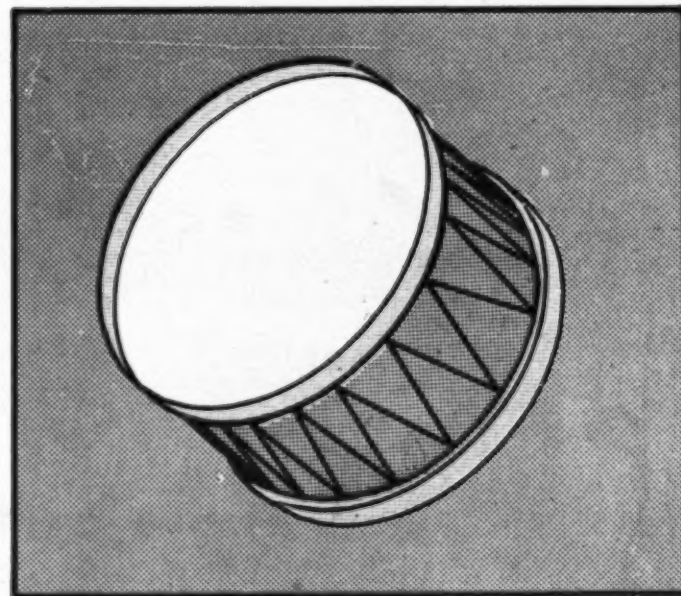
tr



gr



dr



cr

1. The train runs on a

back
track

2. Mother works with a

broom
zoom

3. You may put on the birthday

down
crown

4. Baby likes to play on the

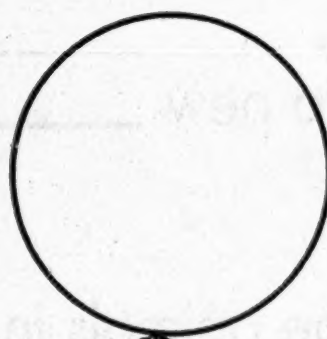
hum
drum

5. Hop, hop, hop went the little

frog
dog
green

6. Color one balloon

seen



Word of the Day

A rectangular box with a dashed line across the middle, intended for writing the word of the day.





barn



man



snow



boy



foot



yard



cow



ball

1. Dick has a new

2. Find all the animals in the

3. Look at the 's button nose.

4. The rides a horse.

A Trip to the Store

Pat is with her mother.

They are going to the store to get some groceries.

They want to get some cabbage, corn, and bread.

On the way they see a little dog.

He is in the pet store window.

Mother gets the groceries, and Pat has fun looking at the little dog.

Mother will make something good for dinner when they get home.

-
- | | | |
|--|-----|----|
| 1. Did Pat and her mother go to the store? | Yes | No |
|--|-----|----|
-
- | | | |
|---------------------------------|-----|----|
| 2. Did they get some ice cream? | Yes | No |
|---------------------------------|-----|----|
-
- | | | |
|-----------------------------------|-----|----|
| 3. Was there a cat in the window? | Yes | No |
|-----------------------------------|-----|----|
-
- | | | |
|--------------------------------------|-----|----|
| 4. Was the dog in the grocery store? | Yes | No |
|--------------------------------------|-----|----|
-
- | | | |
|---------------------------------------|-----|----|
| 5. Will mother make something to eat? | Yes | No |
|---------------------------------------|-----|----|

Word of the Day

What Will Happen Next?

1. Little Bear went up a tree.
He found some honey.
The bees saw him.

Then



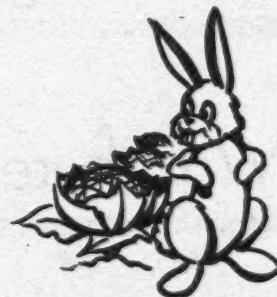
2. Downy Duck walked to the water.
He saw a green frog there.
The frog saw him stop at the brook.

Then



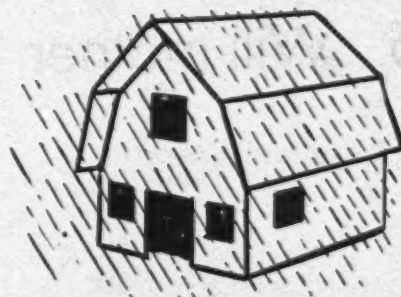
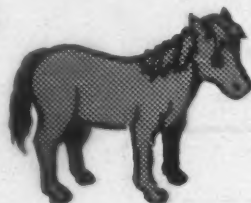
3. Bunny Rabbit hopped to the garden.
He saw little cabbages there.
The farm dog was not around.

Then



4. Black Pony likes to run and play in the sun.
He ran away from the barn.
Rain came down with a splash.

Then



What Is This?

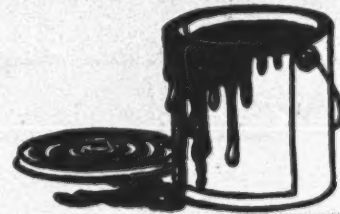
1. Is this go, or is it stop?



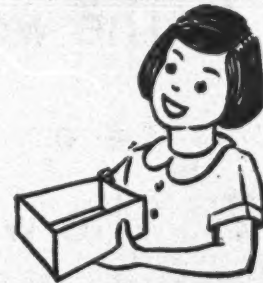
2. Is this play, or is it work?



3. Is this black, or is it white?



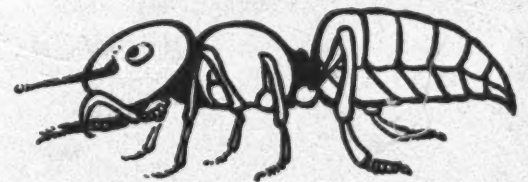
4. Is this something, or is it nothing?



5. Is this aunt, or is it uncle?



6. Is this little, or is it big?



Word of the Day

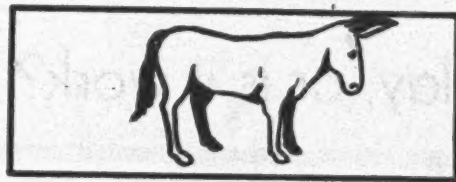
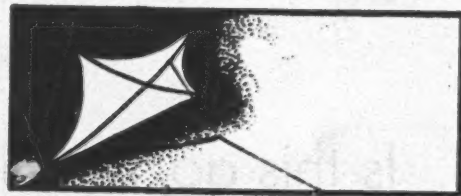
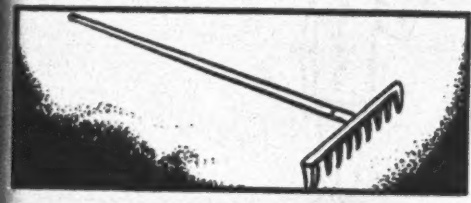
a

e

i

o

u



1. The word stay has the long _____ sound.

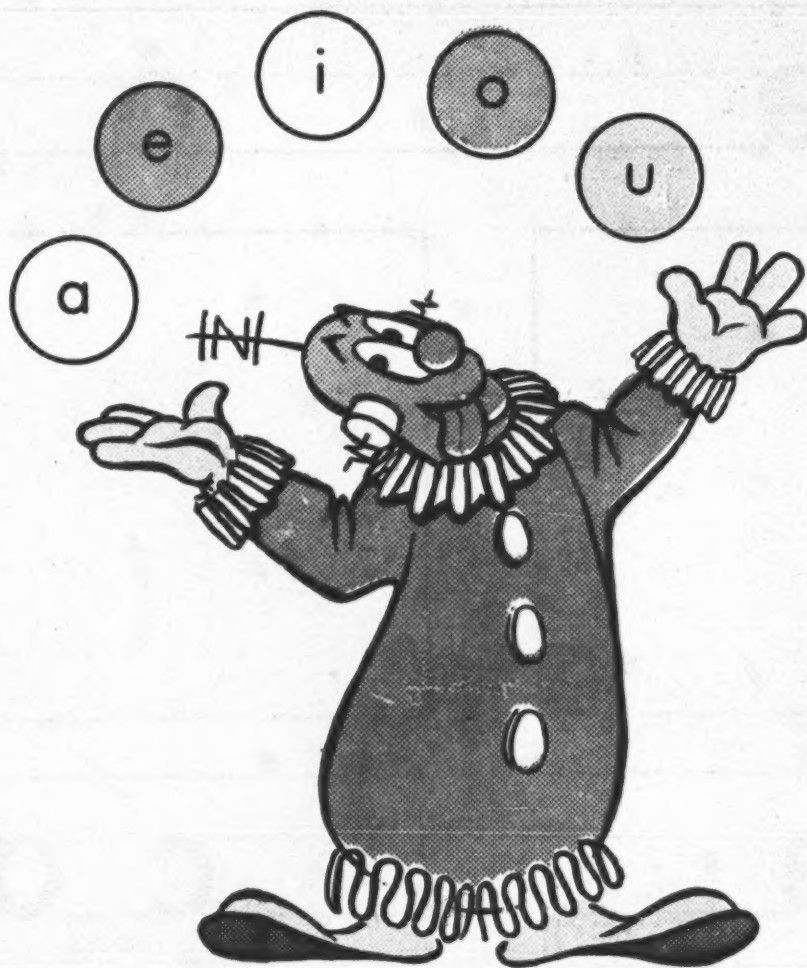
2. The word sleep has the long _____ sound.

3. The word white has the long _____ sound.

4. The word over has the long _____ sound.

5. The word mule has the long _____ sound.

Word of the Day



1. Mother made a ...

bed

doll

cake

2. Father has a big ...

fish

pig

boat

3. Betty wants to ...

run

eat

jump

4. We like to eat ...

apples

turkey

ice

5. Uncle Tom can ride a ...

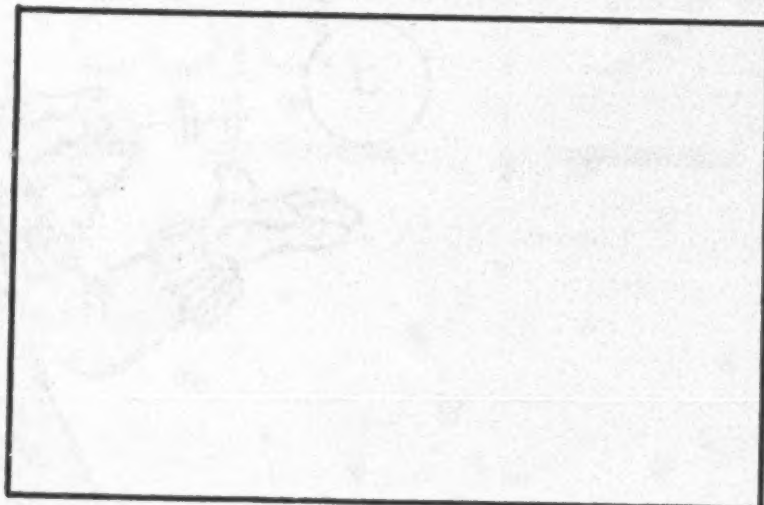
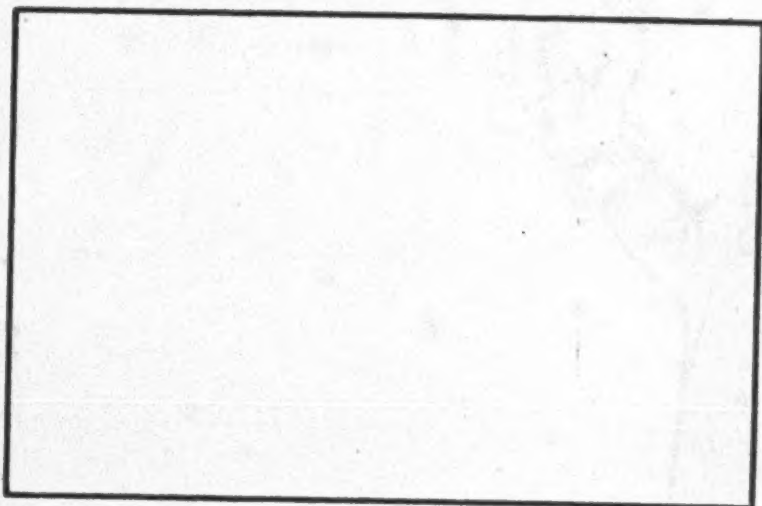
duck

mule

frog

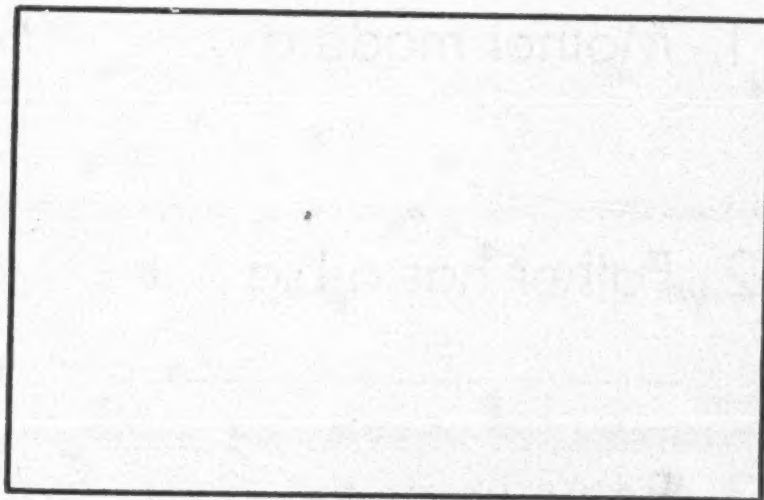
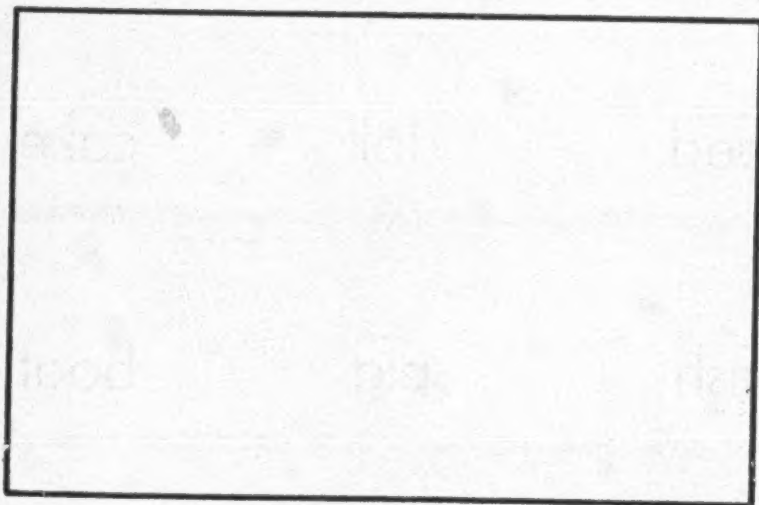
(eighty-three) 83

a e i o u



f ve

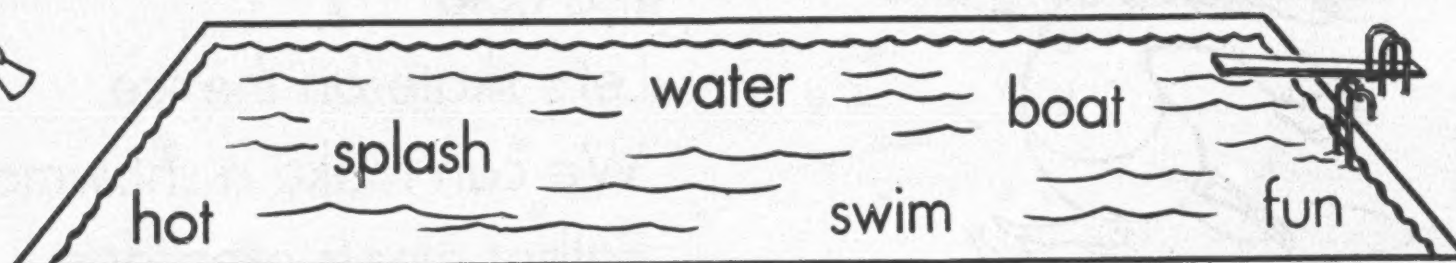
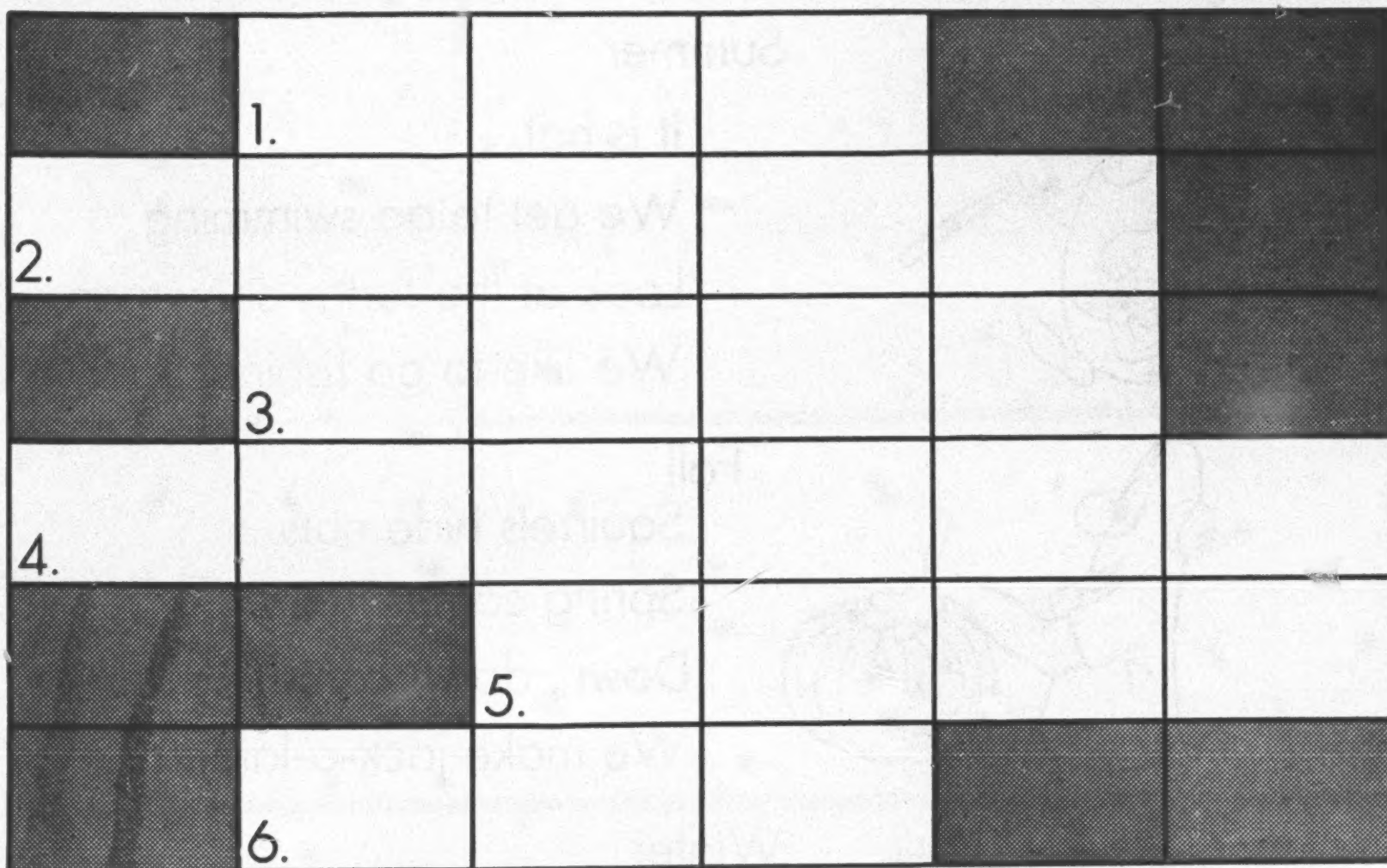
c at



niform

str et

This is my n me.



1. It is today.
2. Look at the blue
3. Let's go for a
4. We like to in the water.
5. Catch the toy
6. This is





Summer

It is hot.

We get to go swimming.

Look at the funny snowman.

We like to go fishing.



Fall

Squirrels hide nuts.

Spring comes next.

Down, down come the leaves.

We make jack-o-lanterns.



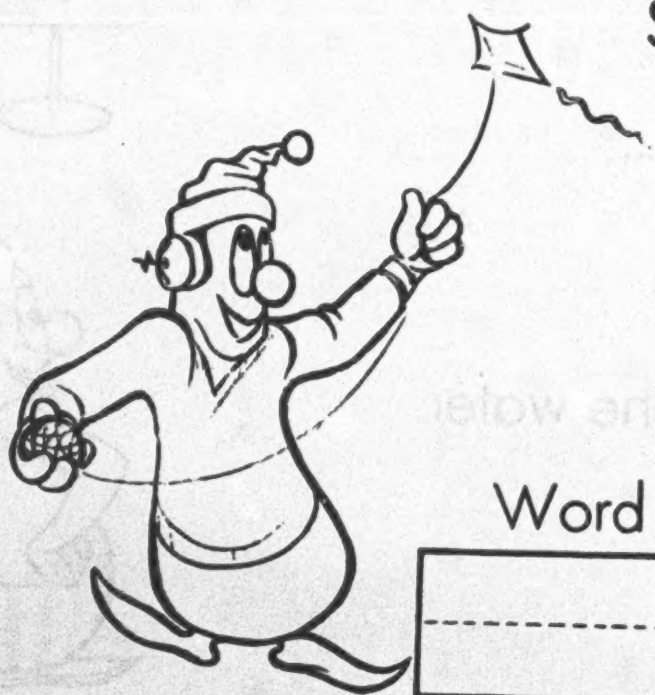
Winter

It is cold.

Let's skate on the ice.

We can make a snowman.

Father plants a garden.



Spring

It is snowing.

We can fly kites.

Let's plant a garden.

Birds are making nests.

Word of the Day

Seasons

Summer

Fall

Winter

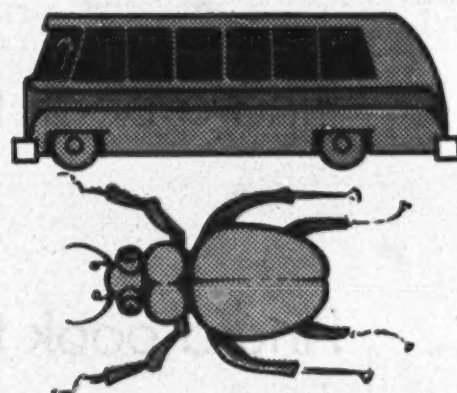
Spring

Handwriting practice lines consisting of solid top and bottom lines with a dashed midline, repeated across the page.

What Did You Do This Summer?

Did you ride a bu _____?

Did you find a bu _____?



Did you ru _____ in a race?

Did you sit on a ru _____ and look at TV?



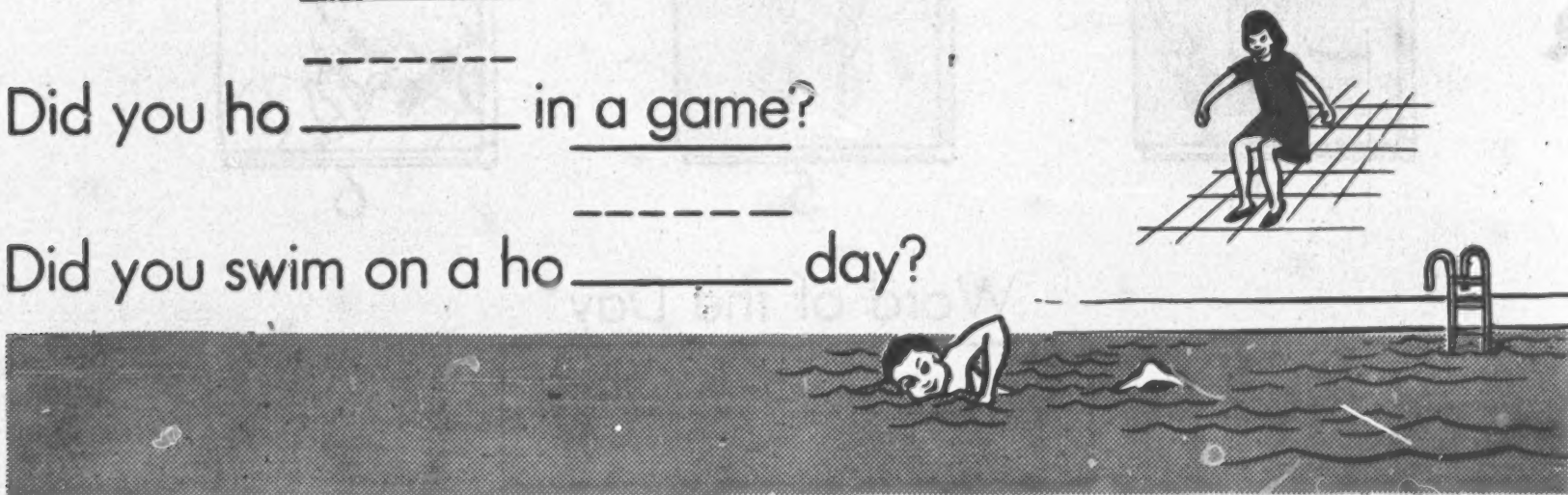
Did you put worms in a ca _____?

Did you play with your pet ca _____?



Did you ho _____ in a game?

Did you swim on a ho _____ day?



Find a book that tells how to dance.

☐

Find a book that tells how to swim.

☐

Find a book that tells how to paint.

☐

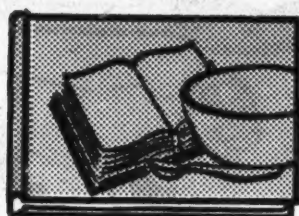
Find a book that tells how to ride.

☐

Find a book that tells how to cook.

☐

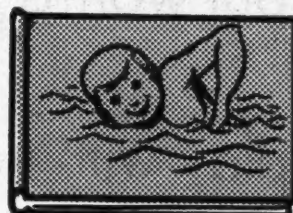
Find a book that tells how to build.

☐

1



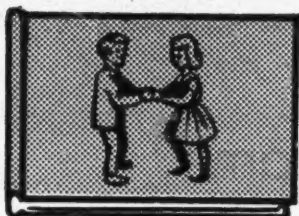
2



3



4

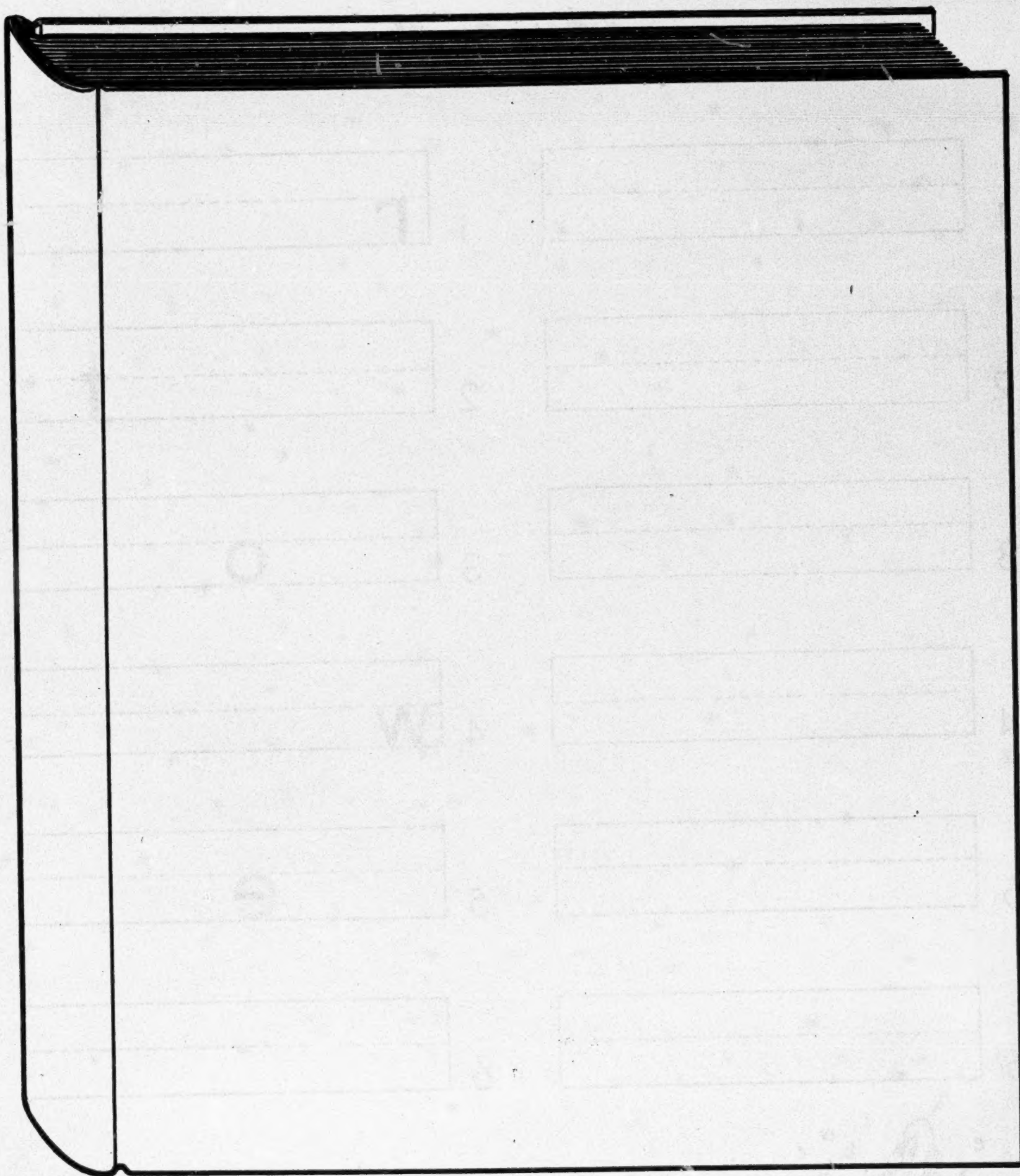


5



6

Word of the Day



I Can Spell

Blank handwriting practice line.

1 r

2 Blank handwriting practice line.

2 t

3 Blank handwriting practice line.

3 o

4 Blank handwriting practice line.

4 w

5 Blank handwriting practice line.

5 e

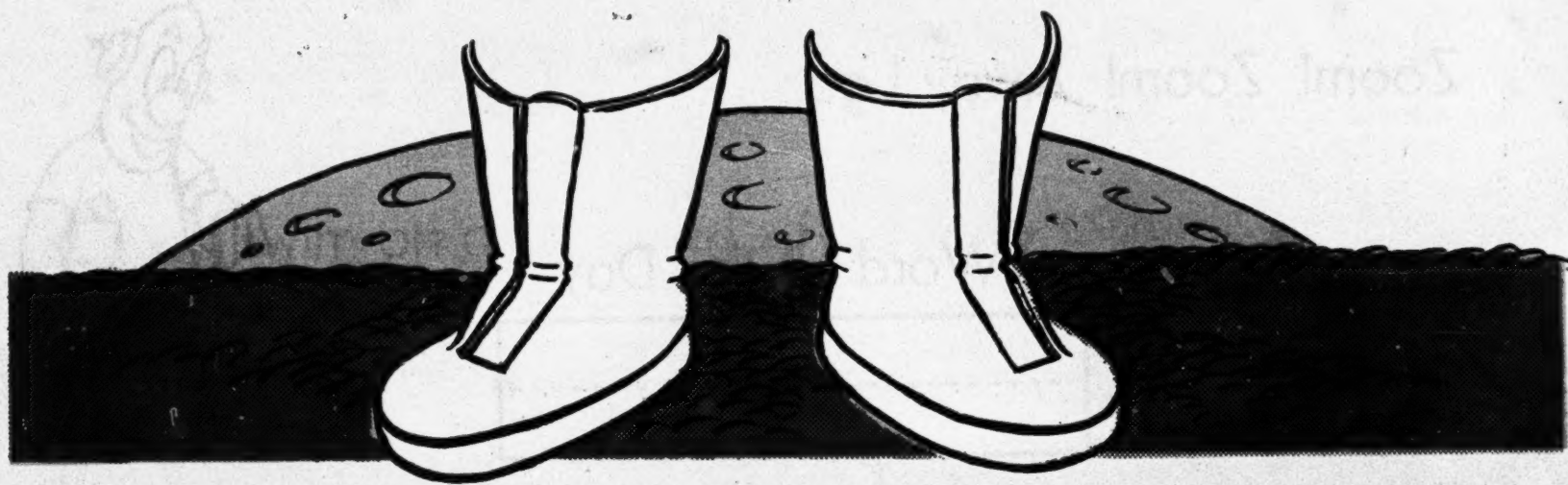
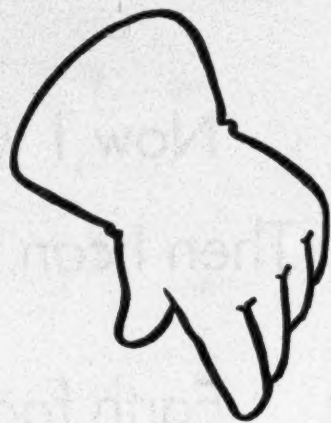
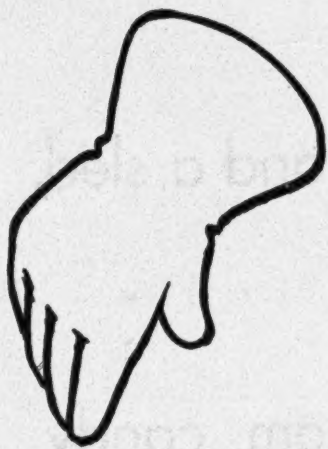
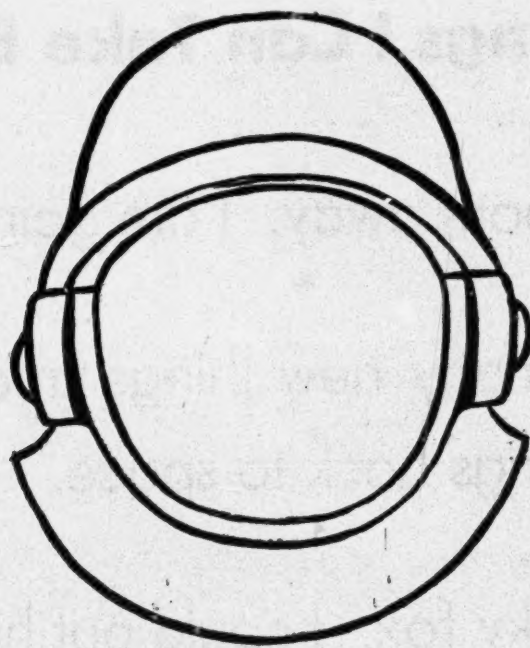
6 Blank handwriting practice line.

6



Word of the Day

Blank handwriting practice line for the word of the day.



Things I Can Take Back

I am ready to zoom away. I am going home to space.

I have learned many new things about earth. I want to take some earth things back to space.

I like the little frisky fox. I could put him in a box. Let me take a turtle, too.

Now I want some toys -- a wagon, a truck, and a sled. Then I can play the way earth children do.

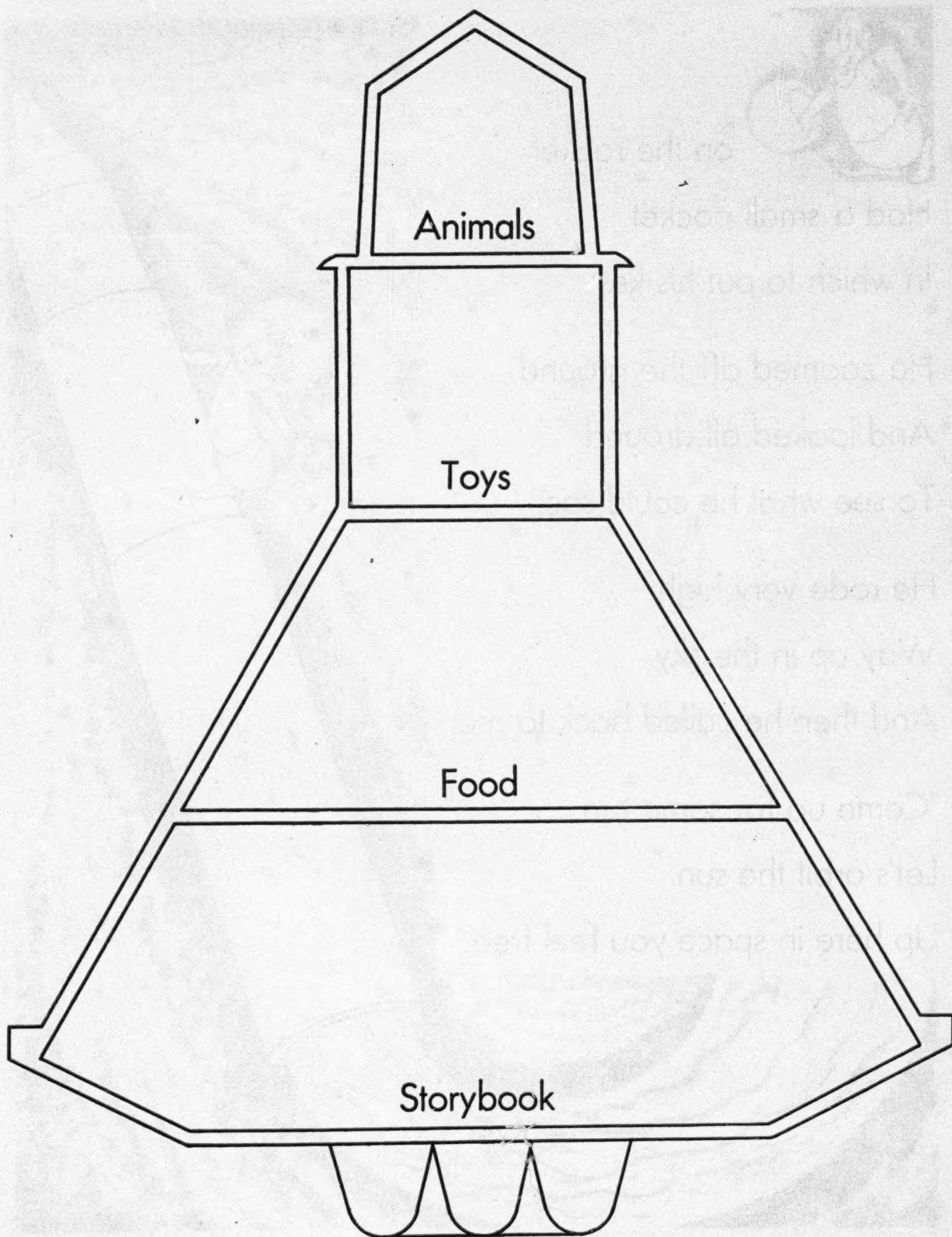
Earth food is good to eat. I will take ice cream, candy, and cake.

Now where is my spaceship key? Oh! I must remember to take my wonderful storybook.

Zoom! Zoom! Away I go.

Word of the Day







on the rocket

Had a small pocket
In which to put his key.

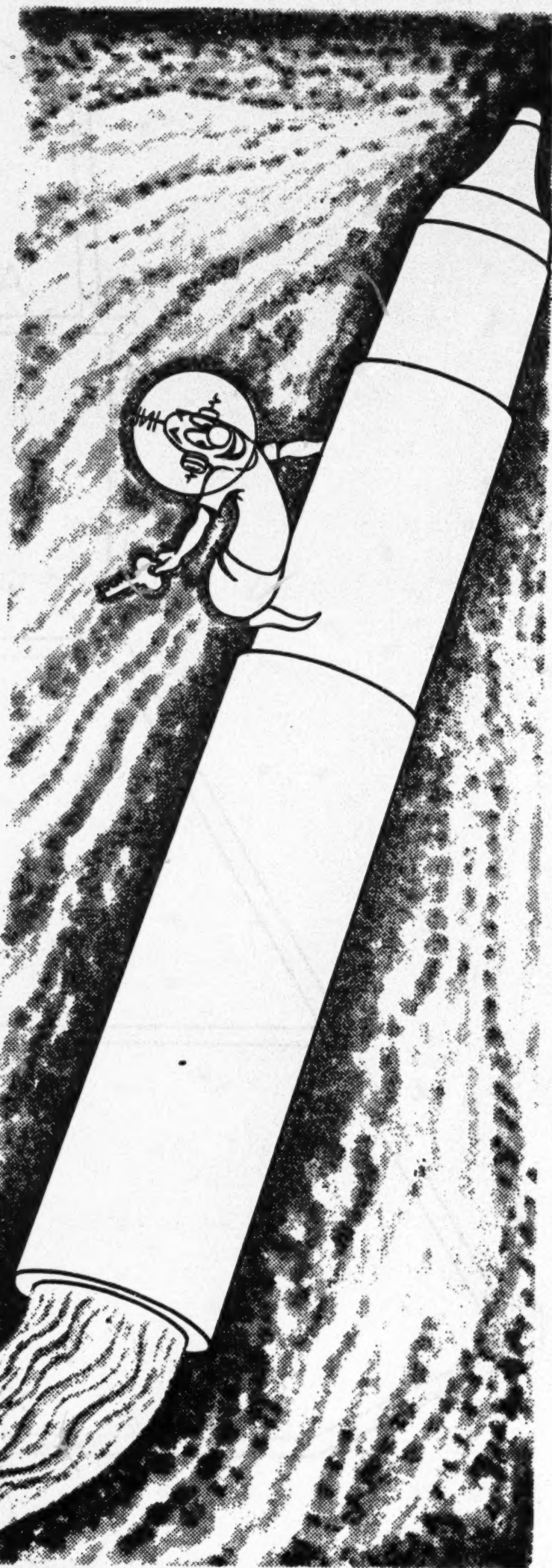
He zoomed off the ground,
And looked all around
To see what he could see.

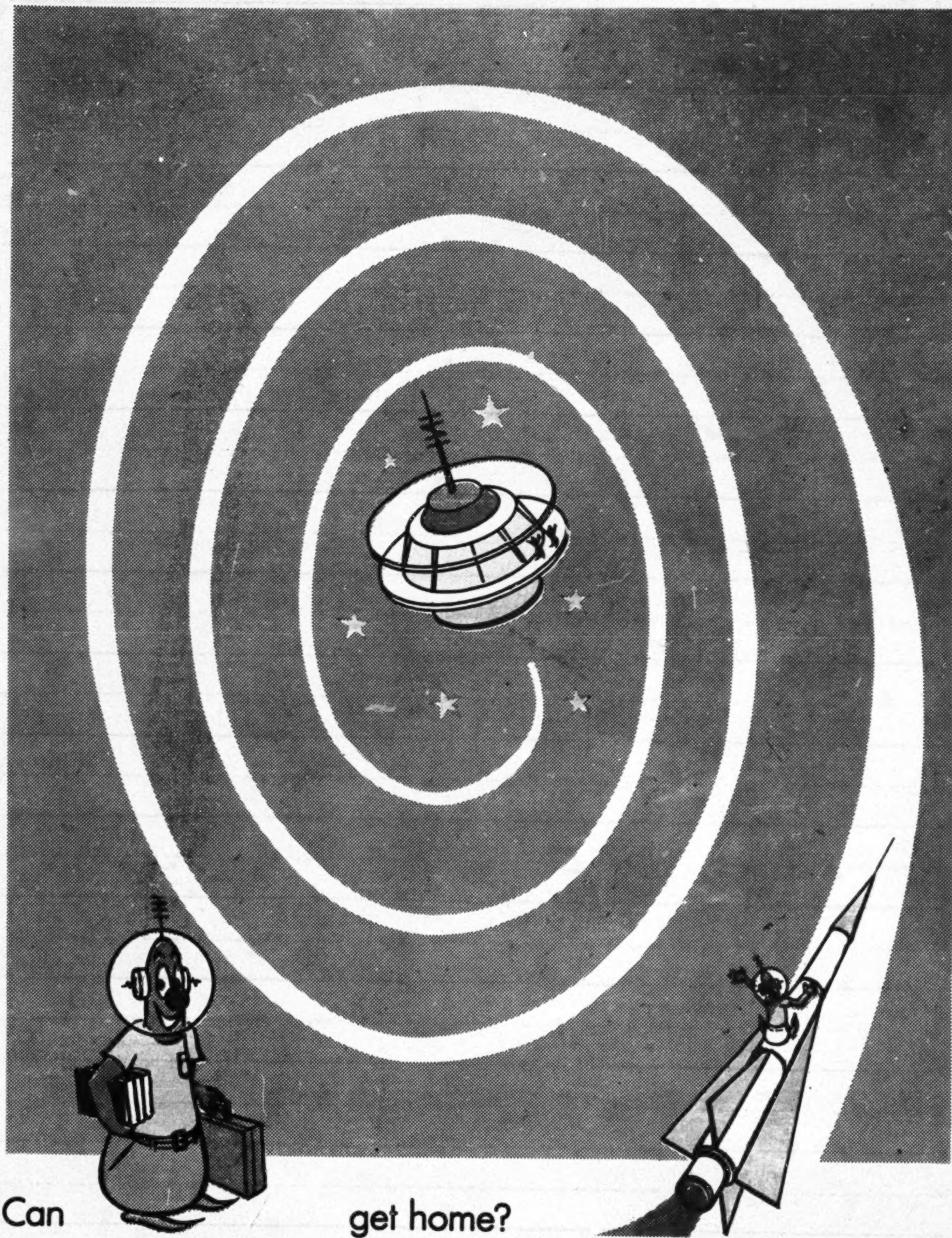
He rode very high
Way up in the sky,
And then he called back to me:

"Come up for some fun.

Let's orbit the sun.

Up here in space you feel free."





Can

get home?

(ninety-seven) 97

Handwriting practice lines consisting of solid top and bottom lines with a dashed midline, repeated across the page.

Books I Have Read

Astronauts

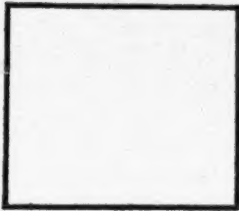
The musical score is written in 3/4 time. It consists of four systems, each with a vocal melody line (treble clef) and a piano accompaniment line (bass clef). The lyrics are written below the vocal line.

System 1:
 Fly high, Zoom through the sky.
 Fast, fast, Off with a blast.

System 2:
 Out in - to space we go.
 In space we speed a - way.

System 3:
 Whee! free! Nice as can be!
 Round, round, then back to the ground.

System 4:
 Leav - ing the world be - low.
 We'll go a - gain some day.

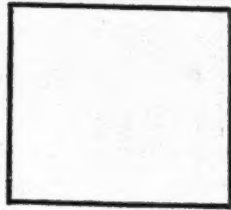


Television Reading Teacher

W T V W

405 Carpenter Street

Evansville, Indiana

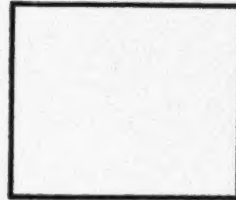


Television Reading Teacher

W T V W

405 Carpenter Street

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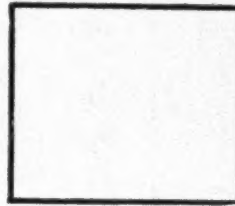


Television Reading Teacher

W T V W

405 Carpenter Street

Evansville, Indiana



Television Reading Teacher

W T V W

405 Carpenter Street

Evansville, Indiana

Please call the puppet

Comments:

My name is

My address is

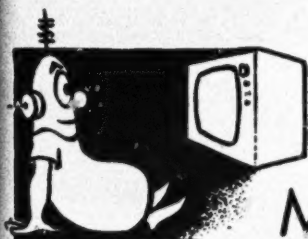
Name (if desired)

I have read _____ books.

The one I like best is

Name

Address



I Looked and Listened

Monday Tuesday Wednesday Thursday Friday

1st
week

2nd
week

3rd
week

4th
week

5th
week

6th
week

7th
week

8th
week

Parent's Signature _____